THE

HISTORY AND PALÆOGRAPHY

OF

MAURYAN BRĀHMĪ SCRIPT

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The Government of Bihar established the Nalanda Institute of Research and Post-Graduate Studies in Buddhist Learning and Pali (The NAVA NĀLANDĀ MAHĀVIHĀRA) at Nalanda in 1951 with the object, *inter alia,* to promote advanced studies and research in Buddhist Learning, and to publish works of permanent value to scholars. This Institute is one of the five others planned by this Government as a token of their homage to the tradition of learning and scholarship for which ancient Bihar was noted. Apart from the Nalanda Institute, four others have been established, namely Mithila Institute of Post-Graduate Studies and Research in Sanskrit Learning at Darbhanga, K. P. Jayaswal Research Institute at Patna, the Bihar Rāshtra Bhāshā Parishad for research and advanced studies in Hindi at Patna and the Vaisali Institute for Post-Graduate Studies in Prakrit and Jainology at Vaisali.

As part of this programme of rehabilitating and reorientating ancient learning and scholarship, this is the research publication Volume III, which is the thesis of Dr. C. S. Upasak, Registrar-cum-Professor of the Institute, approved for the degree of Ph. D. of London University. The Government of Bihar hope to continue to sponsor such projects and trust that this humble service to the world of scholarship and learning would bear fruit in the fulness of time.

DIRECTOR'S NOTE

We have pleasure to publish this Research Volume III from *Nava Nālandā Mahāvihāra*, which embodies the doctoral thesis of Dr. C. S. Upasak, Registrar cum-Professor of the Institute, that was approved by the London University for the Ph D. degree in 1959 Dr. Upasak has contested some old theories and propounded his own. He has worked on Brāhmī Script of Mauryan period, and his researches fill a gap of half a century. It is for the scholars and experts to express their appreciation of the work.

S. MOOKERJEE, M. A. PH.D.,
Director, Nava Nālandā Mahāvihāra,
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FOREWORD

The earliest intelligible written records of India are the great series of inscriptions issued by the Emperor Aśoka and engraved on rocks and pillars throughout his empire. It is now well over one hundred years since these records were first deciphered and studied and the principles of the Aśokan Brāhmī script, from which all later scripts of Hindu India developed, are now quite clear. Since Prinsep first read the edicts of Aśoka many studies of Indian palæography have appeared, tracing the development of the scripts of India from the time of Aśoka to the present day. Many new inscriptions have been discovered and are still being discovered, and from day to day our knowledge of Indian palæography becomes more precise.

Hitherto, however, no really complete and exhaustive analysis has been made of the palæography of the Indian inscriptions of a single short period. My friend Dr. C. S. Upasak, by a careful study of every letter of all the surviving inscriptions of the Mauryan period has removed many older misconceptions, produced several new hypotheses, and thrown fresh light on such knotty problems as the origin of the Brāhmī script. It is much to be hoped that he and other students will do the same for later periods and various regions of India, for only thus may we arrive at a really definitive survey of the whole subject of Indian palæography. By his minute study of the Aśokan script, and by his original approach to the problems connected with it, Dr. Upasak has earned the thanks of all those who are interested in unravelling India's ancient past. Owing to its specialized character, his work will have few readers, but it is nevertheless one of the most important and original contributions to the study of Indology to have been made in recent years, and its author has set new standards in the analytical study of Indian palæography.

A. L. Basham

Professor of the History of South Asia ; University of London.

Nalanda, 20 January, 1960.

PREFACE

The Palæography of Brāhmī is vast and varied. Not only does its use cover a long period of several centuries but also, as being the parent of all the scripts of the Indian sub-continent and many of the south-east Asian countries, it has spread over a very extensive area. The present work is confined to the treatment of the Mauryan Brāhmī script. In other words, it deals with the earliest form of the Brāhmī writing. As a prologue to a fuller study of the script, it is appropriate to tell something about its origin. I have therefore discussed this problem, but only very briefly, since otherwise it would have become a full-length work in itself. And as an epilogue, I have reviewed and presented the palæographical peculiarities of all those inscriptions of uncertain date which are rightly or wrongly believed by some to be the records of the pre-Aśokan or Aśokan period.

While discussing the individual letters of Aśokan Brāhmī, I have done my best to reproduce all the shapes of a letter as found in their facsimiles. But to get a first hand impression, it is useful to consult the facsimiles or to inspect the inscriptions personally. An exhaustive list of all these signs has been compiled and given in the form of Appendices, which should be consulted in conjunction with the individual description of the letter concerned. To reproduce these shapes and to point out their exact position in an edict, I have followed Hultzsch in the *Corpus Inscriptionum Indicarum, Vol. I*, except for a few unpublished inscriptions and those published elsewhere. For the Minor Rock Edict Erragudi, I have consulted Dr. D. C. Sircar's *Select Inscriptions*. For the facsimiles of the unpublished inscriptions, I am indebted to Dr. D. C. Sircar, the Government Epigraphist of India, who very kindly forwarded the full set of the photographs of these inscriptions and allowed me their use. The Rock Edicts of Erragudi are in a damaged and blurred state and so, it was not possible to compile an exhaustive list of

the shapes of each letter from them. Nevertheless, I have endeavoured to include them as far as they are traceable.

The present work substantively constitutes my doctoral thesis approved at the University of London in 1959, and which is now being published through the Nava Nālandā Mahāvihāra (Nalanda Institute of Post-graduate and Research in Pali and Buddhist Studies), Nalanda, (Patna). I am indeed very grateful to the Director and other authorities of the Institute. In the course of my research I have been assisted by various scholars and friends, and I wish to express my thanks to them. I should like, in particular to thank Dr. J. D. M. Derrett and Dr. A. H. Dani for their many valuable and bright suggestions. I am also grateful to the Venerable H. Saddhatissa, M. A., the Chief Incumbent of the London Buddhist Vihara, 10, Ovington Gardens, London, S.W. 3, for the generous help that he readily gave during my stay in London. My thanks are also due to the members of the Library-staff of the School of Oriental and African Studies, London for their excellent help in providing all the materials that I needed. Finally, I should like to express my deepest gratitude to Professor A. L. Basham for his erudite guidance and sympathetic help throughout the period of the preparation of this work, and who has been so kind to write a foreword to the work when he visited Nalanda. I also feel it my duty to thank the Printers, The Tara Printing Works, Varanasi, who did their best to bring out the book as nicely as possible.

C. S. UPASAK

ABBREVIATIONS USED IN THIS WORK

ABORI	: Annals of Bhandarkar Oriental Research Institute.
A. S. I. (A. R.)	: Archæological Survey of India (Annual Report).
A S. I. R.	: Archæological Survey of India Reports (Cunningham).
C. I. I.	: Corpus Inscriptionum Indicarum.
E. I.	: Epigraphia Indica.
I. A.	: Indian Antiquary.
I. H. Q.	: Indian Historical Quarterly.
Ins.	: Inscription.
J.	: Jātaka.
JASB	: Journal of Asiatic Society of Bengal.
JBBRAS	: Journal of Bombay Branch of Royal Asiatic Society.
JBORS	: Journal of Bihar Orissa Research Society.
JBRS	: Journal of Bihar Research Society.
JRAS	: Journal of Royal Asiatic Society.
MPE	: Minor Pillar Edict.
MRE	: Minor Rock Edict.
MSS.	: Manuscripts.
PE	: Pillar Edict.
PE All. Kos.	: Pillar Edict of Allahabad-Kosam.
PEDM	: Pillar Edict of Delhi-Mirath.
PEDT	: Pillar Edict of Delhi-Topra.
PELA	: Pillar Edict of Lauriya-Araraj.
PELN	: Pillar Edict of Lauriya-Nandangarh.
PER	: Pillar Edict of Ramapurva.
RE	: Rock Edict.
RED	: Rock Edict of Dhauli.
REG	: Rock Edict of Girnar.
REJ	: Rock Edict of Jaugaḍa.
REK	: Rock Edict of Kalsi.
SRED	: Separate Rock Edict of Dhauli.
SREJ	: Separate Rock Edict of Jaugaḍa.
Vin.	: Vinaya Piṭaka.

Transliteration of the Devanāgarī Alphabet into the Roman Characters

VOWELS

अ—*a*, आ—*ā*, इ—*i*, ई—*ī*, उ—*u*, ऊ—*ū*,

ए—*e*, ऐ—*ai*, ओ—*o*, औ—*au*, अं—*aṃ*, ऋ—*ṛi*

CONSONANTS

क—*ka*, ख—*kha*, ग—*ga*, घ—*gha*, ङ—*ṅa*,

च—*ca*, छ—*cha*, ज—*ja*, झ—*jha*, ञ—*ña*,

ट—*ṭa*, ठ—*ṭha*, ड—*ḍa*, ढ—*ḍha*, ण—*ṇa*,

त—*ta*, थ—*tha*, द—*da*, ध—*dha*, न—*na*,

प—*pa*, फ—*pha*, ब—*ba*, भ—*bha*, म—*ma*,

य—*ya*, र—*ra*, ल—*la*, व—*va*, श—*śa*,

ष—*ṣa*, स—*sa*, ह—*ha*, ळ—*ḷa*, ड़—*ṛa*.

CONTENTS

CHAPTER 1

Introduction

With the discovery of the Indus Valley Civilization, the history of human civilization in India can be traced back to a hoary antiquity. We know a great deal about the civilization of Egypt and Mesopotamia, as they have left us written materials; which have been satisfactorily deciphered. Unlike them, the Indus people have left only very small and brief inscriptions on seals and sealings; though it may be argued that 'absence of lengthier documents among the finds may suggest that for ordinary purposes perishable materials were used'. It is also generally believed that these seals and sealings were used for mercantile purposes and so probably bear mostly proper names. Several brilliant efforts have been made to read these seals. They bear some 270 different symbols, but no one so far has succeeded in interpreting them; and hence our knowledge of the Indus Civilization as a whole and its script in particular, is very inadequate. But it goes to prove that the use of writing in India was prevalent at least as early as the third millennium B. C.,[1] among a people who had a civilization of their own, which was superior in many respects to that of the Aryans who are supposed to have contributed so much towards the development of world-civilization. Our ignorance of the history of these people causes a big gap in our knowledge of ancient India; and it is to be hoped that when a perfect decipherment of the script comes forward, it will open a new vista in the field of human knowledge.

Many questions relating to the advent of the Aryans in India are by no means finally settled, but it is generally upheld that they were established in the Indus region sometime in the 2nd millennium B. C. The earliest known literary source we

1. Marshall : *Mohenjodaro and the Indus Civilization*, Vol. I, p. 106,

possess is the *Ṛig Veda*, much of which was probably composed by this time. A great deal of material is available in the *Ṛig Veda* in respect of the Aryans' settlement, their life, habits and culture. But when the antiquities unearthed from Harappa and Mohenjodaro and other places are compared with the material available in the *Ṛig Veda*, it leaves no doubt that the people of the Indus Valley Civilization were basically different from the Aryans, and as such no identity between the two can possibly be established. How far the Aryans were responsible for uprooting and subjugating the Indus Valley people and their culture is difficult to decide. In his great report, Sir John Marshall maintained that some two centuries or more elapsed between the fall of the Indus cities and the invasion of the Aryans.[1] This gap has since been much reduced by later scholars and there are some, led by Sir R. M. Wheeler, who believe that the Indus Valley Civilization was overthrown by the Aryans themselves, and the Indus cities, in fact, are those referred to in the *Ṛig Veda*, which were destroyed by the Aryan invaders in or about the fifteenth century B. C.[2] In the absence of any definite proof to link up the abrupt and complete disappearance of the Indus culture and the emergence of a new pastoral society of Aryans, such claims appear more presumptuous than are warranted by the actual facts.

The Ṛig Vedic and later Vedic period was an age when the Aryans were completely settled and they occupied the area down to the Gangetic valley. During this period a vast body of religious literature was composed which was handed down orally from age to age with meticulous accuracy and was not written down until much later times. This vast literature does not give any clear indication of the existence of writing or of any script used in the Aryan India; but the negative evidence for writing in the Vedic period is not a definite proof that writing was wholly unknown to Indians at the time. The literature is mainly theological in nature and reference to the art of writing may not

1. Marshall : *Mohenjodaro and the Indus Civilisation*, Vol. I, pp. 102.

2. Wheeler : *Five Thousand Years of Pakistan*, pp. 32.

necessarily be expected to occur, especially as, even when writing was certainly known, the Brahmans instructed orally, and would rarely write down their most sacred scriptures.

The sixth century B. C. is a landmark in the history of India. From this period onwards, history emerges from legend and dubious tradition ; and one can, to a great extent, reconstruct in outline a reliable history of the period. Although our sources for this period are again mostly religious—the scriptures of Jainism and Buddhism, which are not wholly adequate as pure historical documents—they are nevertheless more trustworthy than the earlier literature and contain authentic reminiscences of historical events. These for the first time explicitly mention the art of writing and the materials used for it. But, to our great disappointment, no written record of this period has so far been discovered, although a few inscribed objects whose dating is by no means finally fixed are supposed by some to have belonged to this period.

For centuries, we find that our whole histoiy principally depends upon literary sources of a manifold nature. It is during the reign of the Mauryan emperor Devānāṃpiya Asoka (269-232 B. C.), the grandson of Chandragupta Maurya, that a great deal of inscribed material first comes to hand. Edicts known as *Dhammalipi* were issued by the king and were caused to be inscribed on rocks, pillars and slabs throughout the length and breadth of his empire. In sharp contrast to the pievious centuries, we find that the people were now acquainted with as many as four main scripts—Brāhmī, Kharoṣṭhī, Aramaic and Greek.[1] The most developed and prevalent script was Brāhmī, which was know from one end to another in the sub-continent of India ; while the Kharoṣṭhī was confined to the north-western region only. Aramaic and Greek were foreign scripts and were known in the regions of the north-west which were for some time under alien rule. In India the Kharoṣṭhī script after a few

1. Recently a Greek inscription of Aśoka with Aramaic version is discovered in Afghanistan: *Un Editto Bilingue Greco-Aramaico di Aśoka*, Serie Orientale Roma XXI, Rome, 1958, Edited by G. Tucci.

centuries died a natural death as it was not suitable for writing Sanskrit or Prakrit,[1] while Brāhmī survived for centuries and became the parent of all the modern Indian scripts and most of those of South-East Asia. The Aramaic and Greek scripts could not take root on Indian soil and after some time they were totally forgotten.

1. Dasgupta, C. C.: *The Development of Kharoṣṭhī Script*, p. 280 ff.; Sircar: *Inscriptions of Aśoka*, p. 25.

CHAPTER II

Origin and Decipherment of Brāhmī Script

Origin of Brāhmī Script

As we have seen, writing in India first appeared with the rise of the Indus Valley Civilization, but what happened after its disappearance is hopelessly unknown to us. Many efforts have been made to decipher the script and also to trace a relation between it and the Brāhmī script,[1] which appears after the lapse of several centuries; but so far it has defied the ingenuity of all the scholars. The Vedic and later Vedic literature is also conspicuously devoid of anything which can explicitly show that the art of writing existed in their times. The question arises whether the Aryans in India who were responsible for composing such a vast literature were utterly illiterate or whether they knew some sort of writing; this is difficult to answer decisively. Most Indologists are of the opinion that the Aryans in India did not know the art of writing, with the result that their literature was traditionally memorised for which a great care was taken. But some scholars, mostly Indians, differ on this point and they have endeavoured to point out some indirect and negative evidence. Pt. G. H. Ojha has pointed out the word *Akṣara* occurring in the *Chāndogya Upaniṣad* and the words *Varṇa* and *Mātrā* in the *Taittiriya Upaniṣad*. So also, the *Aitareya Āraṇyaka* shows the knowledge of the interpretation of words and consonants. He has also pointed out many long numerical references which occur in the *Yajurveda Saṃhitā* and in some of the *Brāhmaṇas*.[2] Dr R. B. Pandey follows him and believes that some sort of writing was used in the composition of these texts,

1. Hunter : *Harappa Script and its connection with other scripts*; Langdon : *Mohenjodaro and the Indus Civilisation*, Vol. II, (Ed. by Marshall), pp. 423.

2. Ojha : *Prācīnalipimālā* (Hindi), pp. 12.

after which they were memorised by the authors for their own use and for the transmission to students.[1] D. R. Bhandarkar also held a similar view and believed that the art of writing was known in the Vedic period.[2] But since no positive evidence can be found in such a vast literature, it is not possible to reach any final conclusion.

The Pāli *Tipiṭakas* whose composition is traditionally believed to have taken place soon after the death of the Buddha at Rājagaha, under the royal patronage of King Ajātasattu, do give indication of writing in those days. The final compilation of these texts is said to have been completed during the reign of Aśoka, when the Third Great Buddhist Council took place. In these Pali texts, we find a number of references to writing and the material used for it. In this respect, the word '*Piṭaka*' itself is of some significance. *Piṭaka* means 'basket', which implies something to contain—a written document. It is hardly likely that this term was used before the texts were committed to writing. The words of the Buddha were remembered by his fellow-Bhikkhus during his life-time and so a '*Saṅgāyanā* or recitation was made soon after his death to give them a permanent and correct shape. The language used was *Māgadhī*. The teachings of the Master were divided into three broad sections according to their contents. These sections got their names according to the *Piṭaka* or 'basket' in which they were assembled. The earliest reference to the word *Piṭaka* on inscriptions is to be found at Śrāvastī, Sarnath and Bharhut inscriptions of 1st Century B. C. or 1st Century A. D.[3]

References to writing occur in the *Vinaya Piṭaka* at many places. The term *Lekhaka* (*Vin.* IV-8) and *Likhāpeti* (*Vin.* II-110) are used for 'writer' and 'caused to be written' respectively, while a 'letter-game' known as *Akkharikā* clearly indicates that

1. Pandey : *Indian Palaeography*, Part I, p. 15.

2. Bhandarkar : *Sir Asutosh Mookerjee Silver Jubilee Volumes*, Vol. III, p. 494 ff.

3. *E. I.* Vol. VIII, p. 179 ; *JASB.*, Vol. LXVII (1898), p. 278 ; Cunningham : *The Stupa of Bharhut*, p. 141, Plate—LVI, No. 41.

some sort of writing was known to the people. A proscribed thief is called *Likhitaka Cora* which literally means a 'registered thief' (*Vin*. I-2). The *Akkharikā* game is also mentioned in the *Dīgha Nikāya* (I-7). The word Akkhara occurs in the *Aṅguttara Nikāya* (I-72, III-107), the *Saṁyutta Nikāya* (II-267, I-38) and the *Dhammapada* (*Taṇhāvagga*-19). In the *Udāna*, the Lekhāsippa or the writing-craft is said to be the best among all the crafts (*Nandavagga*-9). The *Lekhaṇī* or pen is mentioned in the *Aṅguttara Nikāya* (II-200). The prose-*Jātakas*, which are admittedly later in their compilation, possess a number of references to writing, writing material and several kinds of written documents. The word *Potthaka* is explicitly meant for book. The ledger is called *Aya-Potthaka* (*J.* I-2) ; so also *Iṇa-Paṇṇa* is a debt document (*J.* I-230 ; IV-256). The words *Lekha, Likha, Lekhaṇī* occur at several places in the *Jātakas* (*J.* VI-595 ; IV-7 ; I-2, 30). In schools, the writing board was used and was known as *Phalaka* (*J.* I-155,451). All these Pāli evidences prove that some sort of writing definitely existed during the time of the Buddha, or even before his time, but unfortunately we do not know its name or character. The script, when we first meet it in the Aśokan inscriptions, is already a beautiful and finished alphabet and exhibits no sign of adolescence or inperfection. This fact also leads us to infer that writing had a long history before Aśokan inscriptions.

A late Buddhist work, *Lalitavistara*,[1] preserves the names of as many as 64 scripts. The list starts with the Brāhmī script. Another list, mentioned in the Jain Texts—*Pannavaṇāsūtra* and *Samavāyāṅgasūtra*—contains the names of 18 scripts.[2] In these texts also, the first name is that of Brāhmī The *Bhagavatīsūtra*, another Jain text begins with the salutation to the *Baṃbhī Libi*

1. It was translated into Chinese in 308 A. D., but its date cannot be exactly fixed, and it may be even earlier. See-Winternitz : *A History of Indian Literature*, Part II, p. 253-54.

2. Ojha ; *Prācīnalipimālā* (Hindi), p. 17 ; Buehler : *Indian Palaeography*, (I. A. Vol. XXXIII-1904-Appendix) p. 1.

(Brāhmī script).[1] An analysis of these scripts mentioned in these texts will show that some of them are Indian, others are foreign, and some seem to be imaginary and perhaps never existed. To identify these scripts, the Chinese Encyclopaedia—*Fan-Wan-Su-Lin* (composed in 668 A. D.) comes, to our help. This contains a list derived from the *Lalitavistara* and here too the name of Brāhmī comes first. According to it, the invention of writing was made by three divine powers ; the first was *Fan* (Brahmā), who invented the Brāhmī script which runs from left to right ; the second power was *Kia-Lu* (Kharoṣṭha), who invented the Kharoṣṭhī, which is written from right to left ; and the third was *Tsam Ki*, the script invented by whom goes up and down. The Chinese Encyclopaedia further informs us that the first two divine powers were born in India and the third in China.[2] On the basis of this Chinese text we learn that the name of the script written from left to right in India was Brāhmī and that written from right to left was known as Kharoṣṭhī. When these alphabets were first deciphered, scholars gave them different names such as 'Indian-Pali' for Brāhmī and 'Arian-Pali' for Kharoṣṭhī,[3] but these terms are no longer in use. The term Pāli itself is now attributed to a language rather than a script.

We have thus seen that the name of the Brāhmī script never occurs in earlier texts, nor do we find any positive evidence of Brāhmī writing anterior to Aśoka. Who invented this script and how it was adapted so perfectly to suit the characters of Indian languages are interesting and relevant questions which have drawn the attention of many scholars. A number of theories have been propounded to trace the origin of the Brāhmī script. These theories may broadly be divided into two groups : (1) those which trace its origin from some foreign source, and (2) those which regard Brāhmī as of indigenous origin.

1. Ojha: *Prācinalipimālā* (Hindi), p. 17 (Namo Bambhīye Libiye).

2. I. A. Vol. XXXIV, p. 21.

3. Cunningham : *Inscriptions of Asoka*, p. 49 ; Taylor : *The Alphabet*, Vol. II, p. 342-343.

Some earlier scholars believed that the Brāhmī script had its source from the Greek script. Otfried Mueller suggested that Indians learnt the alphabet from the Greeks when they came into contact with them at the time of Alexander's invasion.[1] Scholars like James Prinsep, E. Senart and many others upheld the same view and attributed its origin to the Greek alphabet.[2] Wilson's guess was that Aśoka's Buddhists derived their letters from Greek or Phoenician models.[3] But these views are no longer acceptable since they do not agree with the literary and palaeographic evidences. Moreover both Brāhmī and Greek were prevalent during the time of Aśoka;[4] and hence the former's derivation from the latter would be most improbable.

Another theory that Brāhmī originated from a Semitic alphabet was first suggested by Sir William Jones,[5] and thereafter many scholars followed him. In dealing with this theory, scholars differ as to which branch of the Semitic alphabet influenced the Brāhmī script. These scholars may roughly be divided into three groups—those who trace its origin from (i) Phoenician, (ii) South Semitic, (iii) North Semitic.

A. Weber first suggested that there are many Phoenician letters which are identical with the earliest forms of Brāhmī signs.[6] R. N. Cust also expressed almost the same view and believed that 'the resemblance of the Indian alphabet to those that have taken root in Western Asia, Africa and Europe, all of which are unquestionably of Phoenician origin, is so striking that it is difficult to entertain the idea of a separate

1. Ojha : *Prācīnalipimālā* (Hindi), p. 18.
2. *I. A.*, Vol. XXXV, p. 253.
3. Taylor : *The Alphabet*, Vol. II, p. 304.
4. Recently discovered bilingual inscription of Aśoka from Afghanistan—See *Un Editto Bilingue Greco-Aramaico di Aśoka*, Serie Orientale Roma, XXI. Roma, 1958, Ed. G. Tucci.
5. Taylor : *The Alphabet*, Vol. II, p. 304.
6. Buehler : *Indian Palaeography* (*I. A*, Vol XXXIII, 1904—Appendix) pp. 9-11 ; Diringer : *The Alphabet*, p. 335 ; *I.A.*, Vol. XXXV, p. 253 ; *JRAS* (New Series) Vol. XIII, p. 102.

origin'.[1] A. C. Burnell on the other hand upheld the view that 'all available information points to a Phoenician-Aramaic origin of Indian alphabet'.[2] A contrary view to this theory is sustained by R. B. Pandey that Rigvedic evidence indicates the Indian origin of Phoenicians [*Paṇis*], who carried the alphabet from India to the shores of the Mediterranean.[3] This view is based on a very fanciful interpretation of the data, and need not detain us.

The exponents of the second theory, that the Brāhmī originates from the South Semitic, are Isaac Taylor,[4] Deeke, Sethe[5] and others. They believe that the Brāhmī descended from the script known in the South Semitic region. But this view has not received the support of many scholars for various reasons, the strongest being that the resemblance between Brāhmī and South Semitic characters is very slight.[6]

The greatest champion of the third theory, that the Brāhmī script was derived from the North Semitic, was Prof. G. Buehler. He propounded his theory in his *Indian Palaeography* and brought all his scholarship and expert knowledge of Indian Epigraphy to bear upon the subject. Some of his conclusions are even now very significant. On the basis of a comparison between Brāhmī and North Semitic alphabets, he maintained that twenty two letters of the Brāhmī script were directly derived from the North Semitic character ; some of these are found in early Phoenician inscriptions, a few in the Mesha Stone Inscription, and five in the script on Assyrian weights. For the remaining signs, he adopted certain devices

1. *JRAS*— Vol. XVI (New Series)- 1884-, p. 330.
2. Burnell : *Elements of South Indian Palaeography*, p. 9
3. Pandey : *Indian Palaeography*, Part I, pp. 40-41.
4. Taylor : *The Alphabet*, Vol. I, pp. 335-346 ; Vol. II, pp. 304-323.
5. Diringer : *The Alphabet*, p. 335.
6. Ibid. p. 335 ; Pandey : *Indian Palaeography*, Part I, 41 ; Buehler : *Indian Palaeography* (I. A. Vol. XXXIII, 1904, Appendix), p, 11.

in order to suit his purpose. To answer the most serious objection that Brāhmī was written from left to right whereas Semitic ran from right to left, Buehler pointed out a few wrongly written reversed letters like *Dha*, *O* and *Ta* from Aśokan inscriptions and the reversed style of the Eraṇ coin inscription (which is most probably due to the inadvertence in the engraving of the mould), as the reminiscences of the original Brāhmī writing from right to left. To these, the MRE Erragudi and a Ceylon inscription of Duvegala[1] may be added; but the engraving of the former is arbitrary and shows no style at all (For details see MRE Erragudi) and the latter is solitary and too small. Hence, the few evidences which may be adduced to show that Brāhmī was originally written from right to left are very inconclusive. Although there are a few letters which are similar in their shapes and phonetic values yet the problem is by no means finally settled. Many of the devices adopted by Buehler to suit his purpose are unconvincing, and the same method might be employed to prove the derivation of Brāhmī from any other script.[2] Finally, the discovery of the Indus Valley Civilization and its script cannot be ignored, as the latter may prove to be a turning point in our knowledge of the history of Indian writing when it is perfectly deciphered.

The theory of the indigenous origin of Brāhmī is propounded by many modern scholars, mostly Indians. The solution was first suggested by Lassen and was followed by Edward Thomas, who attributed the invention of Brāhmī to the Dravidian races of South India.[3] This suggestion was probably due to the assumption that before the advent of Aryans in India, Dravidians occupied the entire land and they, being culturally more advanced than the Aryans, invented the art of

1. Sircar : *Select Inscriptions* p. 233.

2. For refutation of the theory see : Ojha : *Prācīnalipimālā*, (Hindi) pp. 22-30; Pandey : *Indian Palaeography*, Part I, pp. 44-50; D. R. Bhandarkar : *Sir Asutosh Mookerjee Silver Jubilee Volumes*, No. III, pp. 502-514.

3. Taylor : *The Alphabet*, Vol. II, p. 305 ; *JRAS* (New Series), Vol. XIII (1881), p. 115.

writing.[1] Since the whole theory was presumptive, it could not therefore get recognition from scholars and is no longer accepted.

General Cunningham believed that the first attempt of mankind at graphic representation must have been confined to pictures or direct imitations of actual objects. On this principle he maintained that the Indian scripts were first evolved from pictographs and later became syllabic. He also ventured to give the name of each group of Brāhmī letters after the part of human body which seemed to him to be represented in the original picture or ideograph. He believed that the Indian alphabets are purely Indian in origin, but at the same time he suggested that the 'Indians must have borrowed the plan of their system from Egyptians'.[2] The views expressed by General Cunningham are sometimes fantastic; and there are other difficulties in accepting his theory, which has long been generally discarded.

Another theory of the Indian origin of Brāhmī was suggested by R. Shamasastri. He deduced certain conclusions based on various signs and symbols representing the *Devas* and *Devanagara* in some Sanskrit Tantric Texts. He pointed out that 'on the plate or leaf, on which the hieroglyphics were written for worship, some big circles and triangles were drawn, and the symbols of gods and goddesses were inscribed in the middle of such figures. The whole combination of the symbols and circles has been called the "city of gods" "*Devānāṃ nagaraṃ*". Hence it stands to reason that the Indian alphabet, many letters of which can be identified with these hieroglyphics, has been called Devanāgarī, or the alphabet derived from the "city of gods".[3] The evidence produced by him comes from the Tantric texts alone, which are of very late origin. Moreover, the symbols and terms used in such texts are very ambiguous

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1. Pandey : *Indian Palaeography*, Part I, p. 35.
2. Cunningham : *Inscriptions of Asoka*, pp. 51-63.
3. *I. A.*, Vol. XXXV (1906), p. 255.

and obscure in nature. A theory built upon such a material leads us to completely erroneous conclusions; and hence not much reliance can be placed upon it.

John Dowson was another great supporter of the indigenous origin of Brāhmī. He pointed out some special features that are peculiar to the Indian alphabet alone, and which are not to be found in any other script of the world. He also believed that 'Indian Pali [Brāhmī] probably had its origin near the course of the Ganges from where it worked upwards and overwhelmed its rivals'.[1] He categorically discarded the Semitic origin of Brāhmī as he took the Indian alphabet to be a 'Hindu invention'. He stated, "But for all this, there remains the remarkable fact that while the Semitic peoples have kept on writing the script from right to left, the Aryan nations pursue the opposite course".[2]

Many Indian scholars hold similar views and advocate the indigenous origin of Brāhmī. They believe that Brāhmī was invented by the Indians themselves and is free from any foreign influence. Jayaswal, following Dowson, stated that 'the phonetical analysis of sound into radical elements—*Akṣaras* or "the permanent ones"—had been discovered by Hindus as early as Ṛig Veda'.[3] Pt. G. H. Ojha very firmly asserts that the Brāhmī alphabets were evolved in India out of pictographs and were later perfected so as best to suit the phonological character of the languages. No foreign influence can possibly be traced in the formation of the letters.[4]

Some scholars suggest that the Brāhmī originated from the Harappa-Mohenjodaro script. Langdom was first to point out that 'the early syllabic alphabet of northern India, known as Brāhmī script, from which all later characters were derived, is most probably a survival of the early pictographic system of the Indus Valley'.[5] Another scholar, Hunter has tried to show

1. *JRAS*, (New Series), Vol. XIII (1881), p. 112.

2. *Ibid*, p. 119.

3. *JBORS* Vol. VI (1920). pp. 188-200.

4. Ojha : *Prācīnalipimālā*, (Hindi), p. 30.

5. *Mohenjodaro and the Indus Valley Civilisation*, Ed. by Marshall Vol. II, p. 427.

that the Brāhmī script descended from the Harappa script, in somewhat greater detail. He has traced out the signs of Brāhmī from Indus Valley seals and thereby he has established a tentative affinity between the two.[1] But the interval of time between the disappearance of the civilization of Mohenjodaro and the first appearance of Brāhmī is too great to make a direct descent probable. Above all, the decipherment of the Harappa script is by no means settled and hence such an ingenious suggestion cannot be taken foı gıanted. R. B. Pandey, another advocate of the indigenous origin of Brāhmī, believes that 'the Brāhmī characteıs were invented by the genius of Indian people and were derived from pictographs, ideographs and phonetic signs, the earliest specimens of which are to be found in the Indus Valley inscriptions'.[2] Dr D. C. Sircar, a great epigıaphist of India, thinks that 'the Brāhmī alphabet seems to have derived from the pre-historic Indus Valley script'.[3]

It has been generally admitted that the Brāhmī alphabets were made perfect and complete by the Sanskrit Grammarians.[4] Anyway, the present order of the letters of the Brāhmī alphabet was definitely the result of their phonetic resea1ches. 'The Indian alphabet is a marvellous and magnificient phenomenon quite uurivalled in the world'.[5] 'Bold, simple, grand, complete the characters are easy to remember, facile to read and dıfficult to mistake, representing with absolute precision the graduated niceties of sound which the phonetic analysis of Sanskrit

1. Hunter : *Harappa Script and its connection with other Scripts.*

2. Pandey : *Indian Palaeography*, Part I, p. 50.

3. Sircar : *Inscriptions of Aśoka*, p. 25,

4. Buehler : *Indian Palaeography* (I. A., Vol. XXXIII-1904, Appendix) p. 4,17 ; Jayswal : *JBORS*, Vol. VI, p. 197 ; Taylor : *The Alphabet*, Vol. II, p. 289 ; R. N. Cust : *JRAS* (New Series), Vol. XVI (1884), p. 326 ; Dowson : *JRAS*, Vol. XIII (1881) (New Series), p. 102-20 ; Cunningham : *Inscriditions of Asoka*, p. 53, 60 ; and many others.

5. Cust : *JRAS* (New Series), Vol. XVI (1884), p. 325.

grammarians had discovered in that marvellous idiom. None of the artificial alphabets which have been proposed by modern phonologists excel it in delicacy, ingenuity, exactitude and comprehensiveness'.[1] No doubt, the arrangement of letters which represents a symmetrical combination of symbols designed to indicate various shades of sound which are grouped together, is unique in the world. The cerebral letters, aspirate consonants, *anusvāra* and *anunāsika*, and the three sibilants are some of the special features that led the scholars to infer that such a perfect system could only be possible through the 'skilled grammarians', who were the masters of phonetics. But until now no attempt has been made to show how far these geniuses of the past, who evolved the most scientific grammar of the world, were responsible for giving the shapes of the letters and how much the Brāhmī script owes to them. In the following lines an endeavour is made to point out certain noteworthy features of Brāhmī which are seemingly evolved on the basis of the rules of Sanskrit phonetics.

When the Brāhmī letters are closely examined, we notice an evolution from the archaic forms of the alphabet; and a distinction between the basic and evolved forms is easily traceable. The method employed in their evolution is more distinct in vowels than the consonants. Let us take first the vowel signs. It is to be noted that the vowel signs represent the Sanskrit grammatical rules of *Vṛiddhi* and *Guṇa* Sandhis. The application of these rules eventually gave rise to other vowel signs.

The shapes of *A*— 𑀅, *I*— 𑀇, and *U*— 𑀉 are the basic forms from which the other vowel signs, viz. *Ā*— 𑀆 *Ī*— 𑀈, *Ū*— 𑀊, *E*— 𑀏, *Ai*— 𑀐, *O*— 𑀑, *Au*— 𑀒 and *Aṃ*— 𑀅𑀁 were evolved. The letter *Ā*— 𑀆 is the

1. Taylor: *The Alphabet*, Vol. II, p. 289.

lengthened *A*, which is indicated by a horizontal dash attached to its right. This horizontal dash is an addition to the previous simple form of the letter. A similar method is applied in indicating the long *Ī* in which the lengthening is shown by adding another dot thus— ∴ . In long *Ū* (*u* + *u* = *ū*), the lengthening is expressed by an extra horizontal stroke in *U* showing a combination of two *Us*, i.e.— L + L = L .

According to Sanskrit grammar, *A* followed by *I* produces the *Guṇa E*; when followed by *U*, it produces *O* (*Adeṅ guṇaḥ*). This formula is perfectly expressed in the adaption of the signs of these letters. In the shape of *E*— ▷, which is *A* + *I* (+ ∴ =) the three strokes of the letter *A* are adapted to the three dots of *I* to produce a new letter *E*— ▷ .

The *Guṇa* relation of *O* (*A* or *Ā* + *U* = *O*) in the symbol is represented similarly. The medial sign for *Ā* is a small horizontal dash [—] and when it is added to the sign of *U*— L , it becomes *O*— (+ L =). But it should be observed that the medial sign of *Ā* should be placed to the right of a letter, whereas in this case it goes to the left. The reason for this feature is obvious, since we have another letter *Ṅ*, which has the same shape with a dash attached to the right in *U*— . It was therefore necessary that this dash in *O* should go to the left rather than to the right.

The *Vriddhi* form *Ai* is shown by adding an extra medial sign to the initial form of the letter *E* (+ =); while *Au* (*Á* + *O* = *Au*), the *Vriddhi* of *O* is expressed by putting a medial sign of *Á* in *O*, i.e. + = . The letter *Aṃ* is shown by putting a dot to the right of the letter *A*, which is obviously a later evolution— .

In the formation of consonants, the evolution is not very regular and accurate. The reason for this may be due to the fact that most of the signs for consonants already existed before the alphabet was perfected by the grammarians. A good number of consonants appear to have been adopted in their primary forms; but later evolved shapes are also distinguishable, in which deliberate design can be noticed. In the *Kavarga* (Gutturals), the letter *Ka*— and *Gha*— appear to be originals; while there exists some similarity between *Kha* — and *Ga*— , although which is the derivative form is difficult to say. Probably *Kha*— —is evolved from *Ga*— , since the latter is a more important letter than the former, and is simpler in formation. Moreover, *Ga* is one of the few Brāhmī letters which bears a close resemblance to a Semitic form, and it may have been adopted from a Semitic mercantile alphabet employed by the traders. *Ña*— , a very rare letter, appears to have been derived from the cerebral *Ṇa*— ,

which was in turn derived from the dental *Na*— .

In the *Cavarga* (palatals), the letter *Cha*— is obviously an evolution from *Ca*— , in which c + c (+ =) is shown. The letter *Ja*— seems to be primary; while of *Jha*— and *Ña*— , the latter seems to have derived its shape from the former.

As regards the *Ṭavarga* or Linguals, the letter *Ṭa*— maintains a basic shape from which the letter *Ṭha*— is developed. Again, *Ḍa*— is a basic form which gives rise to *Ḍha*— and *Ṙa*— . The form of *Ṇa*— is probably derived from *Na*— , a corresponding nasal letter of the dental group.

The letter *Ta* of the *Tavarga* or Dental group possesses an independent shape— ; while the letter *Tha*, being very similar in sound to *Ṭha*, adopts the same shape with the addition of a dot thus— . The letter *Da* seems to be of basic shape— , from which the form of *Dha* develops when

the two vertical lines of *Da* fill up the vacant space— D . The last letter of this group, *Na*—⊥ seems to be the basic letter which gives rise of *Ṇa*.

In the *Pavarga* (Labials), *Pa* maintains the basic shape — ⋃ , from which *Pha*— is developed. The letter *Ba* is a square— □ , which might be explained as two *Pas* of angular form placed one upon the other. But most likely it has an independent shape. A remote similarity can be traced between *Ba*— □ and *Bha*— , in which the lower horizontal line of *Ba* becomes the top vertical in *Bha*; but this is rather a far-fetched guess. The letter *Ma*— —has a purely independent shape, since its appearance is noticed in the Punch-marked coins which are supposed to be pre-Aśokan.[1]

The semi-vowels, *Ya*— , *Ra*— , *La*— and *Va*— take independent shapes and probably existed in the primary alphabet, since no direct affinity can be established between them. Of the sibilants, *Śa*— ∧ cannot be related to the other two, *Sa* and *Ṣa*; and hence is an independent formation. But *Ṣa*— is clearly developed from *Sa*— . The shape of *Ha*— , though like a reversed *La*— seems to have an independent origin.

The letters may be divided thus :

1. Allan : *Catalogue of the coins of Ancient India*, Introduction, pp. xvi—xvii.

Basic or Primary Letters	**Evolved or Secondary Letters**
VOWELS	
A- 𑀅 , *I*- 𑀇 , *U*- 𑀉	*Ā*- 𑀆 , *Ī*- 𑀈 , *Ū*- 𑀊 , *E*- 𑀏 *Ai*- 𑀐 , *O*- 𑀑 , *Au*- 𑀒 , *Aṁ*- 𑀅𑀁
CONSONANTS	
Guttural *Ka*- 𑀓 , *Ga*- 𑀕 , *Gha*- 𑀖	*Kha*- 𑀔 , *Ṅa*- 𑀗
Palatal *Ca*- 𑀘 , *Ja*- 𑀚 , *Jha*- 𑀛	*Cha*- 𑀙 , *Ña*- 𑀜
Lingual *Ṭa*- 𑀝 , *Ḍa*- 𑀟	*Ṭha*- 𑀞 , *Ḍha*- 𑀠 , *Ṇa*- 𑀡 , *Ṙa*- 𑀟
Dental *Ta*- 𑀢 , *Da*- 𑀤 , *Na*- 𑀦	*Tha*- 𑀣 , *Dha*- 𑀥
Labials *Pa*- 𑀧 , *Ba*- 𑀩 , *Ma*- 𑀫	*Pha*- 𑀨 , *Bha*- 𑀪
Semi-vowels *Ya*- 𑀬 , *Ra*- 𑀭 , *La*- 𑀮 , *Va*- 𑀯	
Sibilants *Śa*- 𑀰 , *Sa*- 𑀲	*Ṣa*- 𑀱
Aspirate *Ha*- 𑀳	
= 24	= 21

Total = 45

We thus find that twenty four out of forty five have basic or primary forms whereas the other twenty one are more or less evolved from them. It may be noticed that the first

and the third letters of each *Varga* of the consonant, that is, the unaspirate sounds, and the three main vowels have independent or primary shapes. The presence of only two aspirate letters out of ten among the primary forms, suggests that these are not the part of the earliest Indian alphabet, which did not express aspirate sound, though independent in shape, they may have been invented by the grammarians who perfected the alphabet. A knowldge of the phonetic rules of Sanskrit, as we have seen, is well manifested in their development, especially in the vowel-system. We may with probability suggest that the evolved or secondary forms got their present shapes from the early Sanskrit grammarians, who perfected the Sanskrit alphabet. In course of this perfection, they accepted those letters which already existed and evolved the new shapes, either basing them upon previous forms or coining them independently to suit their purpose. In the form in which we have the Brāhmī alphabet, it is the work, not of merchants, but of learned men who had a knowledge of grammar and Sanskrit phonetics. It may have begun as a mercantile alphabet, based either on vague memories of Harappa Script or derived from contact with Semitic traders, or indeed it may have owed to both these sources; but by the time of Aśoka, it was the most developed and scientific script of the world.

The date of the great Sanskrit grammarian, Pāṇini, is not finally fixed. The various dates assigned to him by the scholars range from 7th to 4th Century B. C., but the majority of scholars are inclined towards the fifth and fourth century B. C.[1] Another grammarian, Yāska, who flourished earlier

1. Buehler—350 B. C. : *Indian Palaeography* (I. A. Vol. XXXIII-1904), p. 2 ; Narain, A. K., Sometime before Alexander : *The Indo-Greeks*, p. 1 ; Goldstuecker—7th-8th century B. C. : *Panini, His place in Sanskrit Literature*, p. 67 ; Charpentier—550 B. C. ; : *JRAS*, 1913, pp. 672-674 ; Raychaudhuri, H. C.-Later half of 6th century B. C. : *Early History of Vaiṣṇava Sect* (1936), p. 30 ; Agrawala, V. S.-Middle of 5th century B. C. : *India as known to Pāṇini*, p. 474 ; Keith-Probably 4th century B. C. : *A history of Sanskrit Literature* (1928), p. 5 ; Dasgupta and De-4th or 5th century B. C. : *A History of Sanskrit Literature*, Vol. I. p. 611.

than Pāṇini, wrote the *Nirukta*, an etymology of Vedic words. In his work, Yāska has mentioned seventeen names of earlier linguists or grammarians. The date of Yāska is not definitely known, but he may be placed sometime in or before the 6th or 7th century B. C.[1] The date of his previous grammarians may further be pushed back as early as 10th century B. C. . It may therefore be safely presumed that by this time the evolution of the Brāhmī script had started. The archaic shapes in their imperfect forms were already present prior to this period. The grammarians accepted these old forms ; and in order to suit their needs, they evolved new forms mainly based upon them. No doubt, some sort of imperfect or undeveloped alphabet existed before these grammarians took it up, most probably amongst the mercantile class.

Decipherment of Brāhmī

An attempt to read the inscriptions of Aśoka was made by Fīroz Shah Tughlaq (1351-1388 A. D.) when he shifted two pillars from Topra and Meerut to Delhi in 1356. He invited a number of Saskrit Pandits to read what was written on them, but no one was able to decipher anything from them.[2] Akbar, the Great Moghal emperor (1556-1605 A. D.), was also inquisitive about the writings on these pillars, but he also could not find anyone who could read them.[3]

Sientific and serious efforts were started only after the foundation of the Asiatic Society of Bengal by Sir William Jones in 1784. For the first time in 1785, Charles Wilkins read the Badal Pillar Inscription of Nārāyaṇapāla (c. 854-908 A. D.), found in Dinajpur district of Bengal ;[4] and in the same year Pt. Radha Kant Sharma was able to read the three

1. Winternitz : *A history of Indian Literature*, Vol. I, pp. 69-70.

2. *Shams-i-Siraj*—Elliot : *History of India*, Vol. III, pp. 350-353; *A. S. I. R.* (Cunningham), Vol. I, p. 163.

3. Ojha : *Prācīnalipimālā*, (Hindi), p. 37.

4. *Asiatic Researches*, Vol. I, pp. 131-144 ; also in *E. I.*, Vol. II, p. 160 ff.

inscriptions of the Cāhamāna king Vīsaladeva, dated 1220 Vikrama Era (1168 A. D.) engraved on the Delhi-Topra pillar of Aśoka.[1] Soon after that J. H. Harrington discovered three Nagarjuni and Barabar inscriptions of the Maukharī king Anantavarman; but he was not able to read them since the script was more archaic than that of Pāla and Cāhamāna inscriptions. However, Charles Wilkins was again successful in deciphering them in 1789 after a great labour of four years.[2] With this further achievement, he was also able to trace some half of the letters of the Gupta alphabet. In 1834, Captain Troyer was able to read the Allahabad Pillar Inscription of Samudragupta, though partially ;[3] but Dr. Mill was more successful than he,[4] and in 1837 read completely the Bhitari Pillar Inscription of Skandagupta.[5] A complete and perfect Gupta Brāhmī alphabet was possible only after James Prinsep had successfully read the Delhi, Kahaum, Sanchi, Amaravati and Girnar inscriptions of Gupta period.[6]

Although the Gupta script was known, the early Brāhmī alphabet still defied the efforts of scholars to decipher it. Christian Lassen, in 1836, was able to read the name of the Indo-Greek king Agathocles on one of his coins.[7] The key was, however, ultimately discovered by the sagacity of James Prinsep. While copying a number of short inscriptions from the pillars at Sanchi, he noticed that they all terminated with the same two letters. On the assumption that the inscriptions were the records of dedication, he conjectured that these two letters 𑀤𑀸𑀦𑀁 represented '*Dānaṃ*'—gift. He was furnished provisionally

1. *Asiatic Researches*, Vol. I, pp. 379-382.
2. *Asiatic Researches*, Vol. II p. 167 ; *JASB* Vol. VI p. 674.
3. *JASB*, Vol. III, pp. 118.
4. Ibid, pp. 339.
5. Ibid, Vol. VI pp. 1.
6. *Essays on Indian Antiquities of the Late James Prinsep* Edited by E. Thomas, Vol. II.
7. Ojha : *Prācīnalipimālā*, (Hindi) p. 40.

with the letter *Da* and *Na*. Supposing that the preceding would be the name of the donor in the genitive case, he obtained the letter *Sa*. Applying this key to the inscriptions of Aśoka at Delhi, Lauriya Araraj and Lauriya Nandangarh, he made out the frequently occurring name of *Devānampiya Piyadasi*, by which Aśoka designated himself; and elaborated his conjectural alphabet through the aid of analogics supplied by the Gupta-Brāhmī script. He then found himself able to translate the longer and more important inscriptions of Aśoka on the Girnar Rock.[1] The final credit thus goes to James Prinsep whose ingenuity and labour have permitted us to understand the ancient Brāhmī inscriptions of India.

1. *Essays on Indian Antiquities of the Late James Prinsep*—Edited by E. Thomas, Vol. II.

CHAPTER III

AŚOKAN BRĀHMĪ SCRIPT

We have seen that some sort of writing existed in India during the time of the Buddha ; and the earliest known name of a script written from left to right was Brāhmī. This script appears for the first time in the edicts of Aśoka in its almost finished and perfect state. The Aśokan inscriptions show that it was most popular, and was known right through the country from one end to another. During later centuries, the regional scripts developed from it and underwent gradual evolution until the present age, when the modern Indian scripts attained their final shapes, which have now become standardised through the use of the press. Remarkable peculiarities are to be noticed in later inscriptions found in different parts of the country and in different periods. These scripts have received their names by the period when they were prevalent or by the region where they were known. Sometimes they are also called after the names of the languages for which they are used, for instance, Bengali, Gujarati, Tamil etc. In some cases, other factors also were responsible for the nomenclature of these later scripts. Devanāgarī, Śāradā etc. have been given divine names ; while Gurumukhī is connected with a religious sect, the Sikhs. In modern times, scholars had to give names to the scripts prevalent in a particular time or area–thus, the Brāhmī in which the Gupta kings wrote their records is generally known as Gupta Brāhmī script, and that of the Vākāṭakas as the Vākāṭaka script. We have used the term 'Aśokan Brāhmī Script' in the same context, which signifies the Brāhmī script used during the time of Aśoka.

The Aśokan inscriptions in Brāhmī are engraved on rocks, pillars and caves, while one is carved on a stone slab. Apart from the fact that the style differs from hand to hand, it is also interesting to observe that variance may occur e[illegible]gh the material on which the record is engraved. Di[illegible]ent h[illegible]

are noticeable in almost all the inscriptions. Many varieties of a letter found in a particular inscription may suggest different hands used for engraving the same inscription. In the Rock Edict of Girnar, we find nine forms of *A*, four forms of *Ra*, six types of *Ja*; while there is a marked difference between the Pillar Edicts I-VI and VII of the Delhi-Topra.

It has been noticed that the craftsmanship used for engraving the pillars is generally superior to that of rocks. The construction of huge monolithic pillars and their beautiful capitals naturally demanded very expert artisans. The exquisite elegance and craftsmanship of the pillars are superb. The Sarnath Pillar capital and similar other pillar capitals show that there was a very high and well developed art at the time. It may be presumed that the artisans who made these pillars were ordinarily employed for engraving the royal commands. They were decidedly more proficient in accurate designing than the ordinary engravers. The pillars were usually installed before they were engraved. The long verticals in a few upper lines in PELN, PELA etc. suggest that the engraving was done when they were in their standing position. The Seventh Edict on the Delhi-Topra Pillar runs round the pillar, which could scarcely have been possible except when the pillar was erected. This was more useful and convenient method in order to avoid any damage that might be caused during transit or installation. The inscriptions themselves point to the fact that pillars already existed in the country before Aśoka caused them to be engraved.[1]

The engraving on the rocks was somewhat different. It required only the smoothing and chiselling of the rock, which did not involve any high skill. A distinction can be noticed between the pillar-engraving and the rock-engraving. The letters on the pillars are more accurate and artistic than those on the rocks. Angular forms are more commonly seen on the rock inscriptions than on the pillars. A remarkable distinction

1. *'Iyaṃ dhammalipi ata athi silāthabhāni vā silāphalakāni vā tata kataviyo'—Pillar Edict, VII.*

is seen in the formation of the letter *A*, which is cursive on the pillars while angular on the rocks. The lines are more straight and parallel on the pillars than on the rocks. Generally a poorer technique of engraving is noticed on the rocks, while the best engraving is to be found on some of the pillars (for example, MPE Lumbini). Perhaps the local artisans were employed to prepare the surface and to engrave the royal commands on the rocks, and, not being as proficient as those employed on the pillars, were responsible for inferior engraving. The name of an engraver, *Capaḍa*, is found inscribed on the Minor Rock Edicts of Brahmagiri, Siddapur and Jatinga-Rameshwar in the South India. He was definitely not a local artisan since he also shows his proficiency in Kharoṣṭhī script which was known in the North Western India alone. He has engraved the word '*Lipikareṇa*' in Kharoṣṭhī. Perhaps he was available locally during the visit of Aśoka to the South India, or accompanied the king in his tour to these places. He has not exhibited a very good hand in engraving the Brāhmī inscriptions, although he seems to have been an expert in carving the Kharoṣṭhī words. He has copied the draft supplied to him. It appears that the drafts of these inscriptions were prepared by Aśoka himself.[1] While trying to copy the draft, as best possible, Capaḍa has mostly carved the standard shapes of the letters; and to a great extent he was successful.

A slab inscription of Aśoka is found at Bhabru. The engraving on the slab is definitely better than on the rocks. To cut a slab an expert mason is needed. The engraving suggests that the carver was a good artisan. The designing of the letters is neat, accurate and artistic. This may be compared with the pillar inscriptions.

Cave inscriptions of Aśoka are few and short. Although no particular distinction can be made between rock and cave inscriptions, minor peculiarities can be noticed here and there. Most of the letters of the cave inscriptions are short and flatte-

1. Dutta & Bajpai: *Development of Buddhism in Uttar Pradesh*, p. 414.

ned. They are not very artistically carved and can be compared with the rock inscriptions.

Aśokan Brāhmī in its general appearance is straight and angular, though a few letters are round in shape. Cursiveness appears throughout, but not abundantly. The height of the letters is usually equal; and sometimes even in the conjuncts an equal height is maintained by making the second letter smaller in size. The lines often run parallel and very seldom there is any digression. Regularly the lines go from left to right except in MRE Erragudi, which is very muddled and where some of the lines run from right to left. This was, as far as we know, never a regular style and was never adopted in succeeding ages, nor can any other example be traced from any of the so-called pre-Aśokan inscriptions.

It is interesting to find that some sort of punctuation was used during the time of Aśoka. Words or group of words are usually separated by leaving some space between the two. Normally, each edict starts on a fresh line, leaving the space blank at the end of the preceding line. Punctuation by a straight vertical line is a special feature of some of the inscriptions. All these punctuative tendencies, though apparent, do not seem to have attained perfection.

Efforts have also been made to make corrections either by erasure or by the insertion of small letters. Sometimes a whole sentence is struck out by a line right through it and the correct words are engraved in small letters above the line. Demarcation of inscriptions is usually shown by the straight lines.

Artistic sense is very nicely manifested, especially in engraving the pillars. Systematic arrangements of words and lines and their neat, clear and deep engraving suggest that the art was well developed and a high degree of excellence was attained. At one place in PEDT-IV-8,[1] a flourish design

1. Here the Roman sign *IV* indicates the number of the edict; and the figure *8* is the line of the edict. The same system is followed throughout.

is seen in the letter *Ma*. This shows the aesthetic sense of the engraver. On the whole, we may say that the art of engraving had a good standing by the time of Aśoka.

Standard Form of the Letters

An examination of the provenance of the forms of Brāhmī letters found in the Aśokan inscriptions shows that one particular shape of a letter is more common and artistic than other forms of the same letter which appear side by side. The shape which is most frequent has to be regarded as the standard one and the other forms should be attributed to other factors. It has been however maintained by some that there existed regional varieties in the Aśokan Brāhmī. Buehler believed that there were southern and northern forms of Aśokan Brāhmī letters,[1] and he ignored the possibility of differences arising out of the employment of different hands or from other similar facts. Pt. G. H. Ojha accepts the regional influence in Aśokan Brāhmī only partially, as he realises the importance of the stylistic characteristics of a particular engraver.[2] Dr. R. B. Pandey, on the other hand, has hurriedly concluded that 'regional sub-varieties are also traceable in Aśokan inscriptions'[3] for which he has adduced no reason nor shown any specific examples of such regional varieties.

An intensive examination of individual letters of Aśokan Brāhmī will be made in the succeeding chapter. There we shall discuss them in a more exhaustive manner. A conscientious study of the formation of each letter has shown that no regional variety as such can be found in the Aśokan inscriptions. The difference that we notice is mainly due to the individual stylistic characteristics either in engraving or in writing the draft which was copied by the engraver. Regional forms of writing cannot be traced, since there exist

1. Buehler: *Indian Palæography* (*I. A.* Vol. XXXIII–1904, Appendix), pp. 6–7.

2. Ojha: *Prācīnalipimālā* (Hindi), p. 49.

3. Pandey: *Indian Palæography*, Part I, p. 17.

fundamental varieties in the inscriptions of the same area, even sometimes in the same inscription. The notation for *Ā* at the top of the initial letter — — is peculiar to Rock Edict of Girnar, whereas it is completely different in the inscriptions of two Sopara Rock Edicts of the same area. There the sign is attached to the middle — — as it is found elsewhere.

If any regional peculiarities did exist in the area, this fundamental difference should not occur. However, this top notation for *Ā* is manifested a thousand miles away in the Gujjara Minor Rock Edict near Jhansi in Madhya Pradesh. How can we account for variant shapes of a letter found in a particular inscription, if there already existed a regional form ? In REG, we notice that there are as many as six forms of *Ja* — , , , , , ; all the prevalent forms of *Ra*— , , , , ; six shapes of *Da* — , , , , , ; three varieties of *Ya*— , , and *Bha*— , , and both the forms of *Ha*— , . Besides these notable variations, cursiveness has also brought many minor changes there. Again, at Dhauli and Jaugaḍa the Rock Edicts are distinctly different from the Separate Rock Edicts. The letter *Dha* is correctly engraved in RED and REJ — — , whereas a reversed shape occurs

in SRED and SREJ — ᑕ . The initial O appears in its reversed form — ᒧ — in RED and REJ, although in the Separate Rock Edicts at both the places, the medial signs of O is correctly attached— e. g. *Ko*— ǂ, which suggests that the correct form of O was used and not the reversed one. A form of *Ja* — ꞓ — is known only in the Rock Edicts of these places, but is absent in the Separate Rock Edicts. A clear distinction is to be seen between the Slab Inscription of Bhabru and the Minor Rock Edict of Bairat. These inscriptions were discovered only a few miles apart; but we find a general difference in the formations of their letters. The letter *E* is always represented thus — △ — in the Slab Inscription, while in MRE, it has this shape — ▷ . There a difference can be noticed in the letter *Sa* also. A difference is even noticeable in PEDT— VII from the rest of the edicts engraved on the same pillar. The Seventh Edict is cursively engraved. The reverse form of *Dha*— ᑕ is noticed only in the VII Edict whereas it is absent on the rest. The spiral form of *Ḍha*— ᑯ is peculiar to the Seventh Edict. A similar distinction can be noticed in the Rock Edict of Kalsi, where the inscriptions engraved on the South Face of the rock show a different style from those that are written on the East Face. The Pillar Edicts of Allahabad are decidedly engraved in a different style from the MPE Queen's or Kosambi, engraved on the same pillar. One can notice some peculiar forms of letters

like *Sa* and *Da* in MPE Queen's. The most remarkable distinction can be seen between the Minor Rock Edict and Rock Edicts at Erragudi. The former not only differs in its style, some of its lines running from right to left, but also shows a clear distinction in the general formation of the letters. The other Minor Rock Edicts of the South India found at Brahmagiri, Siddapur and Jatinga Rameshwar, which are not very far from Erragudi, show a distinctly different style. All this evidence tends to show that in the Aśokan inscriptions regional influence is not to be found. The difference that happens to occur is mainly due to the individual hands.

It has been generally suggested that there was an official or imperial art during the Mauryan period. Coomaraswamy thinks that 'to some extent a distinction can be drawn in the art of this period between the official or court art and a purely indigenous art.'[1] He also further says that 'the official art of Aśoka's reign is mainly represented by the monolithic pillars (Stambha, Lāṭa) on which edicts are engraved.'[2] V. A. Smith states that 'the royal architects were capable of designing and erecting spacious and lofty edifices'.[3] It seems quite probable that the royal engravers were employed to inscribe these edicts, especially the pillar ones, and they followed an imperial or official standard form of script. A chart of the standard type of Aśokan Brāhmī, which is given at the end, will show how the other forms found there are merely mistakes or the results of individual style.

1. Coomaraswamy : Ananda K. : *History of Indian and Indonesian Art*, p. 16.

2. Ibid., p. 17.

3. Smith : *Asoka* p. 107.

CHAPTER IV

THE AŚOKAN BRĀHMĪ ALPHABET AND SYSTEM OF WRITING

In this chapter we discuss the signs of the Aśokan Brāhmī alphabet one by one, in the normal order of Devanāgarī. We conclude with studies of the system of conjunct-consonants, numerals, punctuation and corrections. This chapter should be studied in conjunction with the appendices, where the occurrences of the letters in their various forms are exhaustively classified.

We shall start with the vowels first.

A

The letter that has the largest number of forms in the Aśokan inscriptions is the first letter of the Devanāgarī alphabet, the initial *A*. As many as nineteen shapes of this letter are found. These may roughly be divided into three main groups. The first group, as Buehler calls it,[1] is the 'angular form', consisting of two angular straight lines touching almost in the middle of a straight vertical line to the right— ![]. The second group is referred to as the 'cursive form' because the two left arms are curved instead of straight— ![]. A third type of this letter is nothing but the mixture of both. In this form, not noticed by Buehler, of the two left arms, the upper often becomes cursive and the lower remains straight— ![]. The position is sometimes reversed when the lower becomes curved and the upper remains straight— ![].

1. Buehler: *Indian Palæography* (*I. A.* Vol. XXXIII–1904 Appendix), P. 6.

The first form of the letter— 𑀅 —is rare. It appears only in REG, RED, REJ, SRED—II, REK, MRE Rupnath, MRE Brahmagiri, MRE Siddapur and PE All. Kos.. It is to be noticed that this form is only found in those inscriptions that have been engraved on rocks and is conspicuously absent from those that have been engraved on pillars except PE All. Kos. The reason for this can be suggested. It was the surface of the material that played an important part in deciding the form of the letter. The rock surface was comparatively rough and flat; whereas the pillar surface was highly polished and circular. It is easier to engrave a straight or angular line on a flat rock than on a circular pillar, while a curved line can more easily be engraved on a pillar. Perhaps another reason for the rarity of the straight form is that this form (where two lines must be very exactly drawn so as to meet at one point) required better craftsmanship. If the engraver is not very attentive or is less skilful, it is likely that this form of *A* may take some other shape. We notice that in SRED–I, where an inferior hand is seen, this form of angular *A* is conspicuously absent, though it appears in other edicts of Dhauli. It is because that it needs a good craftsmanship, this form is not very common, and so other forms also appear side by side.

Buehler pointed out that the angular forms appear only in the south, at Girnar, Siddapur, Dhauli and Jaugaḍa. He further maintains that the angular forms of *A* and *Ā* appear to be specially southern ones and believes that they are also the most ancient.[1] But it should be noticed that the Brāhmī inscriptions of Aśoka engraved on rock surfaces are more to be found in the south than in the north, and also that the inscribed pillars are all installed only in the north. As already pointed out, the surface of the material used for the inscription was perhaps one of the main factors for changes in the forms

1. Buehler : *Indian Palæography* (*I. A.* Vol. XXXIII, 1904. Appendix), p. 6; 34.

of letters, though the craftsmanship of a particular engraver was probably in no way less responsible. We find different shapes of one letter in one inscription, sometimes even in one line (e. g. REG-III-5, three forms of *A*). Four or five forms of *A* can be seen in REG. What accounts for such variants? These can only be ascribed to the different hands used in engraving the edict.

Unfortunately Dr. Buehler was unaware of the existence of the MRE Erragudi, where not a single angular form of *A* appears. Here not only do all the occurrences of *A* belong to the so-called cursive form, but also we find an extreme cursive shape — (line 25a). In this form, we find the upper curved line turning to the right very abruptly and thereby producing another shape. Buehler again could not notice the shapes of *A* that appear in the Maski inscription in the south. This inscription too does not have any angular form of *A*. In all the eight distinct lines of the inscription, this letter occurs seven times, and in every case it is of the cursive type. So is the case in the MRE Rajula Mandagiri, an inscription recently discovered in the south. Such peculiarities are perhaps due only to the hand of the engraver. Thus it does not appear very plausible to postulate any southern or northern varieties of this letter, at least in the Aśokan inscriptions.

Another form of straight-shaped *A* is thus— . In this form we notice that the two angular straight lines meet before they actually touch the vertical line to the right, to which they are joined by a short bar. This form seems to be due only to the carelessness or inefficiency of the engraver. The engraver could not plan well and lost accuracy. The lines therefore met before touching at a point on the vertical line, leaving a space which had to be filled in by a bar. This form is an error and so is very rarely seen. It appears only in REG, RED, SRED, REJ, SREJ, REK, MRE Brahmagiri, MRE Siddapur and PE All. Kos..

The other shape of this angular group of *A* is also apparently due to the mistake of the engraver. In this form the two angular lines proceed to meet at a point somewhere in the middle of the vertical line, but instead of meeting there, they touch the vertical line at two different places, leaving some space between them — . Here the carelessness of the engraver is very evident. In this form there occur some minor peculiarities due either to the angular position of the lines or to the space left in between the two points. At times both angular lines start with equal angles, but sometimes they proceed very irregularly. In REG-XII-9, the lower left line of *A* takes a more or less straight horizontal shape and touches the vertical line almost at right angles, while the upper one takes a slightly slanting shape — . The space between the touching points also varies. It is sometimes unusually wide (e. g. REG-VI-10). Since these shapes are due to the slips by the engraver, they appear very rarely. Accuracy in space and angle cannot be expected in this form. This form can be seen in REG, MRE Rupnath and PE All. Kos..

The second group of this letter, the so-called 'cursive group' — — is very common and prevalent throughout. Variants of this group, found on the pillar and rock inscriptions, both in the south and north, are very many more than those found in the 'angular group' already discussed. The reason for so many variants can be explained. In ancient days, the engravers normally were much less concerned with the meaning of the text, than in later times, when literacy was probably more widely spread. In fact they imitated the original script supplied to them, letter by letter. They probably paid very little attention to the meaning of the text, which in some cases they may not have understood at all. Even if the text with the engraver was incorrect or the original script of the text was written in a hurried style, he continued to imitate and engraved

according to the text provided. In REG-I-3, the word *Katayam* is incorrectly engraved as *Katayvam*....... ; while this occurs correctly elsewhere as .... (e.g. MRE Rupnath, Brahmagiri). But here the engraver did not trouble to correct the error, if it actually existed in the original script. This feature of faithful imitation is much more evident in the Minor Rock Edicts engraved by Capaḍa at Brahmagiri, Siddapur and Jatinga Rameshwar than anywhere else. Here we notice such cursive strokes as can occur when one writes hurriedly with pen on paper. A very peculiar shape of *A*— —is found, which is the result of faithful imitation of the original script of the text. Besides this, a further and even more important reason for so many variants of this shape is the craftsmanship of the engraver himself. Differences in the standard of craftsmanship and in the artistic fancies are evident throughout the Aśokan inscriptions, especially in the pillar inscriptions, which are well carved and distinctly engraved. Thus we see in PEDT-IV-8 that the engraver has very artistically designed a flourish shape of *Ma*= . Such peculiarities can be noticed everywhere in all the letters.

The main form of this group is— , which is most common and appears on almost all the pillar and rock inscriptions (For details see Appendix No. 1). The prevalence of this form of the letter in so many inscriptions is perhaps due to its two left arms being cursive, as it is easier to write or engrave the curved lines than the angular ones, especially on the rounded and polished surface of a pillar. The engravers have tried at many places to carve the letters very accurately, joining the two cursive lines at a point exactly in the middle of the vertical line to the right. But at some places, when the engraver is not

attentive, the curved lines become irregular, though they meet at a point in the vertical line.

The other shape of this group is exactly similar to that type of the angular group where the two left arms touch each other at a distance from the vertical stroke, to which they are joined by a small horizontal bar, except that the left arms are cursive instead of angular — . This shape is due to the inaccuracy of the engraver and hence is rare. It can be seen in SRED, REK, MRE Sahasram, MRE Maski, PEDT, PELA, PELN, PER, MPE Lumbini, MPE Nigliva and Slab. Ins. Bhabru.

A similar shape of this letter belonging to this form, is referred to by Buehler which appears in REK.[1] In this form, the left arms are almost straight and meet before they take the turn to the right, being joined by a small horizontal bar to the vertical line — . If one does not observe this shape very minutely, one may take two arms as a single straight line. But they can easily be distinguished if carefully noticed. Dr. Buehler mistakenly pointed out the existence of this shape in PER[2] though the letters of *A* belong to other groups in that inscription. The craftsmanship of REK is very poor and the engraver has evidently worked very hurriedly and carelessly. Since this shape occurs in REK alone, it is apparently an error and hence this cannot be called a variety of the letter.

We have already pointed out in the angular shape that when the two left arms intended to touch the vertical line at a single point diverge and touch the line at two different points, we notice another shape of *A*. In this group also, we find examples in which the two left cursive arms touch the vertical line at

1. Buehler : *Indian Palaeography* (*I. A.*, Vol. XXXIII-1904-Appendix) p. 6.

2. Ibid., p. 6.

two different points instead of at one — . This form is noticed in REG, RED, SRED, REJ, SREJ, MRE Maski, MRE Siddapur, REK, PEDT, PEDM, PER, PE All. Kos., MPE Sanchi and MPE Sarnath. In MRE Erragudi, where the craftsmanship is extremely poor and irregular, a peculiar shape is noticed, in which the two left arms tend to proceed straight and then turn very abruptly at right angles to touch the vertical line to the right — . Another peculiar shape is seen in PE All. Kos.—IV-2 where the two left arms proceed in a slanting way but take an abrupt turn and touch the vertical line at two points very close together — . Poor craftsmanship in these inscriptions is responsible for such shapes.

The third main group of this letter, as already suggested, is nothing but a mixture of both, the angular and cursive forms. This group may roughly be divided into two main shapes. In the former, the upper left arm of the letter is angular while the lower is cursive and the two meet at a point in the middle of the straight vertical line to the right — . In the latter shape, the position of the lines is reversed, with the upper arm curved and the lower angular— . Though the examples of this mixed group are not very common, they appear both on the pillar and rock inscriptions, and in the south as well as in the north. A few minor sub-varieties of this group are to be noticed here and there.

The first shape of this group— —with the upper left arm angular and the lower one cursive, is found only in REG, RED, REJ, SREJ-II, PER, PE All. Kos., MRE Rupnath and MRE Erragudi. Here it may be observed that this shape does not appear as frequently in the pillar inscriptions as in the inscriptions engraved on rocks. As already pointed out, the

writing on the pillars shows more cursive tendency than that on the rocks; and perhaps it is because of this factor that this form is less frequent on the pillars.

A sub-variety of this group is one where the upper left angular line and lower cursive line meet to the left of the vertical line and are joined to it by a short horizontal bar— . This shape is very rare, but can be seen in REG, REJ, REK, MRE Rupnath and PELA. A peculiar straight shape of this form is noticed in REK and PELN. Here the lower cursive line meets with a perpendicular straight line instead of a diagonal one, the two being joined to the vertical line by a horizontal bar— .

Another shape which is very rarely noticed is one where the upper left angular line and the lower cursive line touch the vertical straight line to the right not at one point, but at two different points— . This shape is obviously due to inaccurate designing and is found only in RED, REJ, MRE Rupnath, MRE Jatinga Rameshwar, MRE Rajula Mandagiri and PE All. Kos.

The other sub-variety of the second form of this group is found exactly in the same manner as in the previous group, the only difference being that the left upper arm is cursive while the lower is angular and they touch the vertical straight line to the right at a point in the middle— . Out of all the sub-varieties of this type, it is most numerous. But it should be noticed that the occurrence of this group is very sporadic and sometimes solitary instances are found. This shape can be seen in REG, RED, SRED, SREJ, REK, RE Erragudi, PELA, PER and PE All. Kos.

In the second sub-variety, the upper left cursive arm and the lower angular arm meet and are then joined by a small

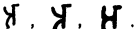
horizontal bar to the straight line to the right— . This shape is very rare indeed and can be seen in REK, PELA and PER.

The third sub-variety has a shape thus— , where the upper cursive arm touches the vertical line at one point while the angular one touches at another. This form is found only in REK, an inscription which is very carelessly engraved. A solitary instance of this shape in somewhat different form — is noticed in MRE Bairat (line 4) where the upper left line has taken a peculiar curve. The carelessness of the engraver is evident in this case.

A peculiar form of *A* is seen at one place in REK-X-4 in the word *Añat*. In this shape the upper left arm bends down instead of turning upwards and touches the vertical straight line to the right at one point, while the lower angular line touches at another— . Obviously it is a mistake.

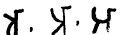
Of the different shapes of *A* discussed above we have noticed that the angular form— —requires more precision and better craftsmanship than the others. But the most popular and widely prevalent shape is the cursive form— . It has already been pointed out that the cursive lines are more easily engraved on the pillars than the straight angular lines. We believe that both the angular and cursive forms— , —were officially used, the former exclusively on the rocks whereas the latter usually on the pillars.

Ā

The initial *Ā* preserves almost all the forms of *A* that we have discussed above, with the only addition of a horizontal dash attached to the right of the vertical line either at its top or in the middle — ⅄, ⅄. The horizontal dash at the top is seen only in REG, MRE Gujjara and at a few places in MRE Erragudi, but in the rest of the rock and pillar inscriptions it is invariably in the middle of the vertical line. On the basis of the location of the dash, the forms of *Ā* may be divided into two groups.

The Girnar version of the Fourteen Rock Edicts is very conspicuous in possessing the form where the dash is attached to the top. It is strange that the other group of *Ā* where the dash is in the middle, which is most prevalent and very commonly seen in almost all the other pillar and rock inscriptions of Aśoka, is completely absent in REG. This feature is very significant and deserves some consideration. It may be suggested that it is due to the influence of the peculiar style of writing then prevalent in the Girnar region. But, as already discussed when dealing with the letter *A*, the engraver was largely responsible for the formation of any new peculiar shape of a letter. The engraver's personal style was perhaps a very important factor in placing this dash at the top of the vertical line of *Ā*. So is the case with the MRE Gujjara. As regards the MRE Erragudi, it should be borne in mind that it was engraved most carelessly; and if there be any glaring instance of engraver's errors or carelessness, they are certainly to be found in this inscription,[1] where the forms of *A* and *Ā* have taken various shapes of different groups and there is no uniformity in them. The carelessness in designing the letters has been so very rampant that almost every letter has a different shape. The horizontal dash is sometimes at the top, sometimes below the top and sometimes

1. Barua, B.M. in *I.H.Q.*, Vol. IX, p. 113.

in the middle of the vertical line. It appears as if the engraver never paid any attention to putting the dash at a particular point. We cannot therefore give much importance to the peculiarities of a letter found in MRE Erragudi. In this connection, the shape of this letter in later inscriptions should also be taken into consideration. It is noteworthy that in later ages the horizontal dash of *Ā* is always attached to the middle. The Girnar Inscription of Mahākṣatrapa Rudradāman of 2nd Century A. D.[1], engraved on the same rock, possesses *Ā* with its dash in the middle and not at the top as found in REG. In the Casket Relic Inscription of Bhattiprolu,[2] which shows another style and emanates from another part of India, we likewise find this dash in the middle of the vertical line of *Ā*. The Besnagar Pillar Inscription of Bhāgabhadra,[3] found in the western part of the country, and not seriously diverging in its script from the Mauryan style, also has the dash in the middle of the vertical stroke. It does not appear therefore feasible to characterise this feature as due to any regional influence. The two Sopara Rock Edicts found in the same area do not possess this form, which again strengthens our presumption.

The letter *Ā* with the horizontal dash at the top is noticed in all the three groups of *Ā*; viz. 'angular', 'cursive' and 'mixture' as already discussed above. The angular shape has three forms— , , . These shapes are designed exactly in the same manner as discussed in our treatment of angular group of *A*. Three main shapes appear in the cursive style, where the left arms are curved — , , . Owing to the carelessness of the engraver this peculiar shape — — is seen in REG–X–1. A form of *Ā* that appears in the MRE Erragudi–25a, is of an extremely cursive shape, where the left upper cursive arm takes a very abrupt turn to the right

1. *E. I.* Vol. VIII, p. 36 ff.
2. *E. I.* Vol. II. p. 323 ff.
3. Sircar, D. C.: *Select Inscriptions*, p. 90.

and the lower one remains normally curved, but they touch the vertical line at two different points with the horizontal dash at the top — . The mixed forms of this group with the horizontal dash at the top are noticed once in MRE Erragudi and thrice in REG. Their shapes are thus — , , .

The other main group of *Ā*, with a horizontal dash in the middle of the vertical line to the right, is most prevalent, and is found throughout the rock and pillar inscriptions. This group may again be sub-divided into three types according to the position of the left arms. In the first type, the two left arms are angular and meet at a point in the middle of the vertical line, from where the horizontal dash is projected to the right — . This form is apparently one of the standard shapes and can be seen in RED, REJ, SREJ, PE All. Kos., MRE Rupnath, MRE Brahmagiri and MRE Siddapur. The other shape in the angular style is that in which the two left angular lines are joined by a horizontal bar to the vertical line to the right that crosses it — . This shape is rare and can be seen only in REK, RED, REJ, SREJ-II and MRE Brahmagiri. It should be observed that owing to the angular left arms, this shape mostly occurs in the inscriptions engraved on rocks.

The other most prevalent form of this group is the cursive form of *Ā* where the two left arms are curved and meet at a point in the middle of the vertical line, from where the dash is projected to the right — . This shape can be seen in REK, RED, SRED-I, SREJ-I, PEDT, PEDM, PELA, PELN, PER, PE All. Kos., MPE Queen's, MPE Kosambi, MPE Sarnath, MPE Lumbini, MRE Sahasram, MRE Jatinga Rameshwar and RE Erragudi. In the other forms of the cursive group of *Ā*, the two cursive arms meet the vertical line at two different points

and a horizontal dash is attached to the middle of the space left in between the two points — . Sometimes the dash is attached to the upper line and sometimes to the lower. This form can be seen in REK, RED, SRED, REJ, SREJ-I, PEDT, PER, MPE Sarnath, MRE Siddapur and MRE Erragudi. A peculiar shape, like *A* as noticed above, — — is seen in PE All. Kos., which seems to appear due to the slovenliness of the engraver. The other form where the left cursive lines are attached to the vertical line by a horizontal bar that crosses it to the right — — can be seen in PEDT, PELA, PELN, PER, MPE Nigliva, Slab Ins. of Bhabru and RE Erragudi. A different shape of this type with its upper left arm straight and lower one curved — is seen only in REK and PELN.

As already mentioned, the technique of MRE Erragudi being very inferior, we notice a number of shapes of *Ā*. We have seen some of them in the previous group of it, while other shapes occur when the horizontal dash is attached below the top of the vertical line. With their left arms cursive, we notice these two shapes — . .

A few forms of *Ā* with the horizontal dash attached to the middle are noticed in the mixed group, where either the upper left arm is angular and lower curved, or the position is reversed. The first shape of this type — — is found in RED, REJ, PER, MRE Siddapur and MRE Rajula Mandagiri. A sub-type — — appears only in RED, SRED-I, REJ and MRE Jatinga Rameshwar. In MRE Erragudi, in this shape, the

horizontal dash is attached below the top — . Another shape, where the upper angular line and lower curved one are joined by a horizontal bar that crosses the vertical line in the the middle — — is seen only in the RED and PER. Another shape of this form with less angular upper line and lower one cursive — —is seen in REK, PELA, PELN, PER and MPE Kosambi. With the upper cursive and lower angular arms, two shapes are noticed — , . The former appears in REK, SRED, REJ, SREJ and MRE Bairat; while the latter form occurs in REK, REJ, PELA and PER.

We suggest that both the angular and cursive forms — , were the official standard shapes. Other forms are either unskilfully designed or influenced by hurried style or sometimes mistakes.

I

The initial *I* [1] is represented by three dots arranged triangularly. In the arrangement of these dots, which are not always uniformly set, some four varieties are noticed in the Aśokan inscriptions. Generally the two dots are put one above

1. The shape of long initial Ī, during the time of Aśoka, is not known, since no specimen is to be found in the inscriptions. But it occurs in later inscriptions where the sound is represented by four dots — ⁚⁚ , which we may presume to have been the form of the Aśokan period.

the other and the third placed to the right almost in the middle at an equal distance from them — : • ; and sometimes the position of the third dot is reversed, and it is placed to the left of the two — • : . In some other instances, we find two dots placed horizontally in one line and the third placed above in the middle almost at an equal distance from them — ∴ ; and at others we find the third dot below the two dots in the middle — ∵ .

Of these four shapes of *I*, the first form with two dots one above the other and the third to the right in the middle— : • — is most prevalent and is commonly found in the rock and pillar inscriptions (For details see Appendix No. 3). This form of the letter seems to be standard official one, because firstly it prevails throughout the series of Aśokan inscriptions, and secondly, the later development of the letter also tends to the same conclusion. The Kṣatrapa inscriptions of 2nd Century A. D. retain the same position of the two dots. Even in the Gupta age, the two left dots preserve their positions and the third dot is elongated to a vertical line— :| .

The shape with the third dot to the left of the two dots — • : — is very rare, but appears both on the pillar and rock inscriptions. It can be seen in REG, REK, SREJ-I, PER, PE All. Kos., MRE Sahasram, MRE Siddapur, MRE Erragudi and Slab Ins. Bhabru.

The other group where we find the two dots horizontally placed in a line and the third dot either above or below them is also very rare. The former shape ∵ with the dots

above can be seen in REG, PEDT, PELA, PELN, PER, MPE Sarnath, MRE Maski and MRE Erragudi; while the latter form— . ˙ . —with the dots below appears only in REG, PEDT, MPE Sarnath, MRE Erragudi and Cave Ins. Barabar. These forms are presumably due to the slovenliness on the part of the engraver.

U

In the Aśokan inscriptions, the initial *U*[1] is represented by two lines—a long vertical and short horizontal one—forming a right angle resembling the letter L of the Roman alphabet— L . In fact this is a most simply designed letter and so we do not find many variants of it, though, on account of the engravers' carelessness other shapes of the letter also appear here and there.

The standard shape, with a long straight vertical line and small horizontal one— L — is most prevatent and common. This form of the letter can be seen in almost all the pillar and rock inscriptions (For details see Appendix No. 4).

Another shape, slightly different, has its vertical line somewhat slanting, and is obviously due to the carelessness of the engraver — L . This form is very rare, and can be seen in REK, REG, RED, REJ, PEDT, PELA, PER, MPE Sarnath and MRE Rupnath. Another shape is to be noticed

1. The form of long initial Ū is not to be found in the Aśokan inscriptions, but in later inscriptions, its shape is thus— L , which was presumably the sign prevalent during the Aśokan period.

where the horizontal stroke slants upwards— . This shape is seen only in MRE Sahasram and MRE Siddapur. In some pillar inscriptions, we notice the right angle tending to a curve and the horizontal line to go upwards— . This cursiveness is perhaps partly due to the carelessness and partly due to the imitation of a hurriedly written draft. This shape can be seen in PELA and PE All. Kos. .

E

The shape of initial *E* is a triangle. It appears as if the three dots of *I* have been joined together. The positions of the dots in *I* normally agree with the positions of the angles in *E*. Generally the triangle is composed of a vertical stroke to the left and two other lines which starting from either ends, meet at a central point to the right — ▷ . In another form the position of the angles is reversed and the two lines from the either ends of the vertical line meet at a central point to the left — ◁ . A third shape is also seen where the two angles are at the bottom and one at the top — △ . Some other shapes, owing to the engraver's errors, are also noticed.

The first shape — ▷—is most common and prevails throughout. This form can be seen both on pillar and rock inscriptions (For details see Appendix No. 5). The reason for this shape being so very common was perhaps that the Brāhmī script was written from left to right. The engraver drew a vertical line first and then naturally proceeded to the right to

join the two lines from each end at a central point. The other shapes were perhaps the result of erroneous designing of the letter. This form was evidently the standard one.

The other reversed shape with two lines to the left of the vertical line — — is very rare. It appears that the engraver could carve this shape only when he allowed enough space to the left of the vertical stroke for the other two lines or when he started from the meeting point of the two angular lines which were to join the vertical stroke to the right. Whatever may have been the position, it is evident enough that this shape is not very common and hence cannot be accepted as a standard form. It appears only in REG, REK, RED, REJ, SREJ-I and PE All. Kos. .

The third shape of the letter, with two bottom angles and one at the top— — is equally rare. It is seen in REG, REK, SRED, SREJ, PEDT, PER, MPE Queen's and Slab Ins. Bhabru. It is interesting to observe that in some of the inscriptions we notice this shape most frequent (e. g. Slab Ins. Bhabru). Generally the two lines from the ends of the horizontal line are very accurately joined at the top ; but sometimes when the engraver is less attentive and his planning is not accurate, we notice the top angle tending to become curved— .
This cursive shape can only be seen on the two pillar inscriptions of PEDT and PER. Nowhere else does this shape appear on the rocks, the reasons, as already suggested, may have been the round surface of the pillar. In REK, which is very carelessly engraved, we find another similar shape where no line is straight — . Once in PER also this shape appears.
It seems that one of the engravers of these two inscriptions of REK and PER was one and the same person, as we notice a

few similar forms of other letters found in these two sets of inscriptions alone (e. g. see Appendix No. 1 of *A*.)

The rock inscriptions of Kalsi possesses an unique shape of this letter, where it appears as if a shape of *U*— ∟ —is joined by a third line thus— ◺ . This is obviously an error on the part of the engraver. A few other shapes, where one or two lines of the triangle are somewhat curved, are also noticed. In REG and REK, we find a shape with the left arm of the triangle curved and the two right hand lines straight— ▷ . Another shape with two right arms slightly curved and the left arm straight— D —is seen in REG, SREJ–II, PELA and PELN.[1]

O

The vowel *O* is the *Guṇa* of *U*, and perhaps on account of this, an additional stroke is added to the left at the top of *U* to make it *O*— ⅂ . Since the occurrence of the letter in the texts of the Aśokan inscriptions is very sporadic, we do not notice many variants in the letter. The shape of the letter is very simple and straight, so the cursiveness is not as frequently seen as in other letters. A tendency to cursiveness is one of the main factors in bringing about many variants in the shape of a letter. The letter *O* gives little opportunity for many variants owing to its simple shape. A completely

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1. There is no example of initial *Ai* in the Aśokan inscriptions. From later epigraphs, however, we may assume that its shape was thus— ▷.

different shape, in reversed style, with the upper horizontal stroke to the right and the lower one to the left—

—is also seen. A few other minor shapes that can be accounted for as engravers' errors, are also noticed here and there.

The first form——, which appears to be the standard official one, is most numerous and can be seen in REG, REK, PELA, PELN, PER, MPE Kosambi, MPE Sanchi and MPE Sarnath. In this group, we notice a tendency to slanting angles, sometimes in the vertical line, and sometimes in the upper or lower horizontal ones. The vertical line usually remains straight, and once in REK, we notice the upper horizontal line slanting to form this shape— . At one place again in REK, the lower horizontal stroke slants upwards— . These shapes are apparently due to the carelessness of the engravers of REK.

The other group, with the top horizontal stroke to the right and the bottom to the left — — appears only in two rock inscriptions of Dhauli and Jaugaḍa. It is just the reversed form of the first shape. It presumably appeared owing to the stylistic characteristics of the engraver of RED and REJ. Obviously this form is not a standard one. Its prevalence is limited. Other inscriptions of Aśoka possess only the former shape. Later inscriptions of Bhāgabhadra[1] and the Hāthīgumphā Inscription of Khāravela,[2] always preserve the shape with upper stroke to the left and the lower one to the right. The Kuṣāṇa and Śaka and Kṣatrapa inscriptions invariably possess the former shape. The Bhattiprolu Inscriptions of south India

1. *A. S. I. (A. R.)*—1908-9, p. 126; Sircar: *Select Inscriptions*, p. 90.

2. Sircar : *Select Inscriptions*, p. 206.

also have the *O* with its upper stroke to the left and the lower one to the right.[1]

As already mentioned, the additional stroke in the letter *U* is perhaps due to the fact that *O* is the *Guṇa* of *U*. And if this is the reason, the stroke cannot be added to the right because if added to the right, the *U* will become *Ṅ*— ⊏ —;[2] instead of *O*. Hence the stroke can only be added to the left, unless the whole letter is reversed, as we find in RED and REJ.

Dr. Buehler has put forward a suggestion with regard to the prevalence of this shape — ⎾ . He states that, sometime before the Mauryan period, the Brāhmī script was probably written in 'boustrophedon', since the Aśokan edicts show a few traces of writing from right to left, in the *O* of Jaugaḍa and Dhauli.[3] He believes that this reversed shape of *O* — ⎾ — is the reminiscent form of *O* written in 'boustrophedon' style before the Mauryan age. But his contention does not hold good. In MRE Erragudi, where some of the lines are engraved in reversed style, we do not find any such reversed form. Nor do we notice this reversed form of *O* anywhere else except in RED and REJ. Buehler admits that *O* is derived from *U* because grammatically *O* is the *Guṇa* vowel of *U*.[4] But since no reversed form of *U* appears in the Aśokan inscriptions, we find no reason to accept that the reversed *O* is a survival of 'boustrophedon' writing.

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1. *E. I.* Vol. II, P. 323 ff.

2. This letter is not attested in the Aśokan inscriptions, but appears in those of later dates. We may therefore assume that it was the shape of the letter prevalent during the Mauryan period.

3. Buehler : *Indian palæography* (*I. A.* Vol. XXXIII–1904, Appendix), p. 8.

4. Ibid, p. 14.

Moreover, the 'boustrophedon' style does not necessarily imply the reversed position of letters. It is the arrangement of the lines that matters. Buehler was unaware of existence of MRE Erragudi, and it is clear from this that if the 'boustrophedon' style was ever regularly used in India, the letters had the usual form, notwithstanding their direction of writing.[1] However, whatever might have been the reason for its appearance, it is definite that this was not a standard form and was perhaps due more to the stylistic peculiarity of the engraver than anything else.[2]

Ka

In the Aśokan inscriptions, the first consonant of the Indian alphabet, *Ka* is represented as a simple cross—+—, equal straight lines bisecting each other at right angles in the middle. The letter is very simple and so we do not find many variants of it. Of course when the engraver was not attentive or accurate, the lines sometimes became unequal or curved or did not bisect each other at right angles. Such minor errors are certainly the cause of the occasional different forms of the letter.

The standard form—the simple cross with equal arms bisecting at right angles in the middle— + —is most prevalent and can be seen in almost all the inscriptions (For details see Appendix No. 7).

1. See also Duwe Gala Cave Inscription of Ceylon: Sircar: *Select Inscriptions*, p. 233. This record belongs to about the 1st. Century B. C. and reads from right to left, but the letters are not reversed.

2. The shape of *Au* is not known through the Aśokan inscriptions, but in later inscriptions it is thus— [glyph] —, which we believe to be the form prevalent during the period.

A shape, in which we find a long vertical and a short horizontal line, bisecting each other at right angles in the middle— —is not very common, but is sometimes seen on pillars and rocks. This shape perhaps arose from the fact that the engraver first drew the vertical line, but since he had not left a proportionate space for the horizontal line to its left, he had to make the horizontal line short. Sometimes, when he is very careless, the vertical line becomes too long. This feature is more conspicuous in the pillar inscriptions than the rocks. This shape with a long vertical can be seen in REG, REK, RED, SRED, REJ, PEDT, PELA, PELN, PER, PE All. Kos., MPE Sarnath, MRE Brahmagiri, MRE Erragudi and MRE Rajula Mandagiri. At some places we also notice that the long vertical is not actually bisecting in the middle. The horizontal line sometimes crosses the vertical line through its lower half— —, and sometimes through its upper half— . The former shape can be seen in PELA, PER, MRE Sahasram and MRE Gujjara; while the latter appears in REK, PEDT, PELN, MPE Sarnath and MRE Rupnath.

Sporadic instances are seen in REG, RED and SRED—I, where the horizontal line becomes long and the vertical one short — . We also notice that when the engraver is not very accurate or expert, he first draws the vertical line, then the first half and after which the second half. In doing so, his planning is disturbed and hence the left and right halves of one horizontal line look like two strokes instead of one— This shape can be seen in REG, RED, REJ, SREJ-II, PEDT and PER. Sometimes when the horizontal stroke is first drawn, we notice two distinct strokes in place of one vertical line— . This is

obviously an error and so is rarely seen in REG, REK, RED, SRED-II, REJ, SREJ-I, PEDT, PELA, MRE Bairat, MRE Siddapur, MRE Erragudi and Slab Ins. Bhabru. In PEDT and MPE Sanchi, we notice the vertical line slanting to the right—, and in REG, REJ, PEDT and MRE Erragudi, it curves to the left—. The horizontal line also sometimes tends to become curved. In RED, SREJ—I and PELN it slightly curves downwards— ; while in SREJ-II and MRE Rupnath, it goes upwards—. All these forms are due to the errors on the part of the engraver. The standard form was a simple cross——, and was most common and prevalent throughout.

Kha

The letter *Kha* is shaped like a simple hook with a dot or a circle at its lower end — , . This hook-like shape of the letter led General Cunningham to postulate the arbitrary view that 'the form of this letter appears to have derived from the common Indian hoe or mattock, which has been used by the people from time immemorial for digging their fields. The radical word for this is "Khan"—to dig, the letter is therefore a symbol of the action of the arms in the characteristic form of digging.'[1] Of course the shape of the letter is like a hoe or mattock, but to aver that the shape of the letter was based on

1. Cunningham; *Inscriptions of Asoka*, p. 54.

that instrument is more than doubtful. However, the forms of the letter found in the Aśokan inscriptions may roughly be divided into two groups, the first having a straight vertical line with a dot or a circle at the foot— , ; and the second with slanting vertical having a dot or a circle at the foot— , .

The hook with straight vertical and a dot or knob at its lower end— — is the most prevalent and common form. This shape can be seen both on the pillar and the rock inscriptions of the north and south. The dot or knob at its foot is usually small; but sometimes bigger dots are also noticed (e. g. in MRE Brahmagiri) — . It appears that the lower knob was originally a circle — sometimes small, sometimes large — and while writing hurriedly with ink, the circle was filled in. The engravers naturally placed little importance on these minor variations and imitated the original hand-written draft. A deliberate filling of the circle is very evident in MRE Brahmagiri-4, where the engraver seems to have taken much pains to carve exactly the same shapes as supplied in the original text. The straight shaped *Kha* with the knob at the bottom can be seen in almost all the pillar and rock inscriptions of Aśoka (For details see Appendix No. 8).

The other shape with a straight vertical portion and a circle at the end — —is the most artistic. Naturally it is not as common as the previous one, but can be seen in REK, SREJ, PELN, MPE Sarnath, MRE Sahasram and MRE Maski. At some places, the vertical portion becomes short and at others it is long. The circle at foot also varies in size. In REK, the vertical portion is generally shorter in size than elsewhere. In some pillar inscriptions (e. g. in PELA, PELN,

PER) the circle has sometimes taken a very tiny shape – ʔ ,– which is perhaps due to the artistic taste of the engraver.

At some places in REK, we notice that the circle has taken a shape somewhat like a triangle— ʔ . In REJ and SREJ—I, the circle takes a flat shape— ʔ . Obviously these shapes are due to the carelessness of the engraver.

A shape with straight vertical but having no dot or circle— ʔ —is seldom to be noticed in REG, SRED-I, PEDT, MRE Siddapur, Cave Ins. Barabar and Slab Ins. Bhabru. This is actually not a variety of the letter. Presumably the engraver forgot to put the dot or circle at the end of the vertical line and passed on, leaving the letter incomplete. Buehler has stated that this shape was confined to the southern versions and was particularly common in Girnar.[1] But he failed to notice its existence in the northern inscriptions of Aśoka (For details see Appendix No. 8). Pt. G. H. Ojha also noticed this shape in Girnar only and included it as one of its varieties.[2]

The other group, where the vertical portion tends to become somewhat slanting, is neither very common nor does it possess many varieties. The most numerous form of this shape is a simple slanting hook with a dot at its foot— ʔ . This shape can be seen in REG, RED, SRED, REJ, RE Bombay-Sopara-VIII, PEDT, PELA, PELN, PE All. Kos., MPE Sanchi and MRE Jatinga Rameshwar. The slanting

1. Buehler : *Indian Palaeography* (*I. A.*, Vol. XXXIII–1904, Appendix), p. 35.

2. Ojha : *Prācīnalipimālā* (Hindi), Plate–I.

shape has taken a peculiar shape— ꝗ —in some of the pillar inscriptions, which can be seen in PEDT, PELA, PELN and PER. A form somewhat similar to this shape occurs once in MRE Brahmagiri. In MRE Erragudi, we find this shape without a dot or circle at the foot— ꝗ .

In REK, which is artistically very poor, we notice a big open loop to the right of the small cursive vertical part of the letter— ꝗ . This shape is not found anywhere else, and obviously is due to the engraver's own style of writing, or to that of the script from which he copied.

The standard official form of *Kha* was probably the shape that was most artistic and that survived in later centuries— ꝗ . The circle at the foot is a very distinctive feature of the letter. The later inscriptions[1] invariably possess this loop, which can be traced down to the modern form of *Kha* in the Devanāgarī script. The circle at the foot was less easy to carve than the dot, and, for this reason, the most common shape has a dot rather than a circle. Moreover, as already stated, an open circle or filled circle (in the form of a dot or knob) made little difference for the engraver. Many inscriptions possess both the forms (e. g. MPE Sarnath).

Ga

The letter *Ga* is composed of two lines forming an acute angle at the top, resembling an inverted V — Λ . Regarding

1. e. g. See : Besanagar Pillar Inscription of Bhāgabhadra—Sircar : *Select Inscriptions*, p. 90; Baḍavā Pillar Inscription of Maukharis–*E.I.*, Vol. XXIII–p. 52; Hāthigumphā Ins. of Khāravela—Sircar : Ibid. p. 206.

the origin of the letter, an arbitrary view was put forward by General Cunningham who stated that 'this form of the letter would seem to have been derived from a pair of human legs separated, as in the action of walking or simple motion, and now, the radical word for motion is *Gam* — to go.'[1] The letter, being very simple in shape has only few varieties. A tendency that developed in a later age, that of the angles becoming rounded — ∩ — is sometimes noticed in the Aśokan inscriptions also. At some places, the lines are equal; and sometimes they are unequal and curved. Such irregularities are more frequent in REK than anywhere else.

The straight form of the letter, with two equal lines and a pointed angle at the top — ∧ — seems to have been the standard one. This form is most common and can be seen in almost all the pillar and rock inscriptions (For details see Appendix No. 9).

A form with its right arm long and left one short — ∧ — appears in REG, REK, REJ, RE Bombay Sopara-VIII, PELA, PE All. Kos. and MPE Sanchi. Its reversed shape, with its left line long and right one short — ∧ —is noticed only in REK and PEDT. When the left arm tends to become slightly curved, we have this shape — ∩ — which appears sometimes in REG, REK, PELN and MRE Maski. Another shape, in which the right arm curves— ∩ — is seen in many more places than the previous one. This shape appears in REG, REK, PEDT, PELA and MRE Erragudi. In REK, a peculiar shape of the letter appears when the left arm is unusu-

1. Cunningham: *Inscriptions of Asoka*, p. 55.

ally long and straight and the right one curved — . All these forms are obviously due to the carelessness of the engraver.

The shape where the angle tends to become curved — — is very rare and appears only on the rock inscriptions of Girnar, Kalsi and Dhauli. This shape of the letter was presumably formed when the engraver was lacking in accuracy and failed to join the two lines at a point. He then joined the two by a curve at the top. In MRE Erragudi, the letter has taken a shape like a horseshoe — . Another shape where the left arm is straight and long and the right one small and slanting with a curve at the top— — is seen in PEDT and MRE Siddapur. All these forms are probably errors on the part of the engraver or to the imitation of a hurriedly written draft.

Gha

In the Aśokan inscriptions, the letter *Gha* is shaped like a fish-hook, having a prong in the middle of the curve— The letter occurs very sporadically in the text, and so we do not find many variants of it. The standard shape— occurs in REG, REK, RED, REJ, SREJ, PEDT, PEDM, PELA, PELN, PER, MPE Kosambi, MPE Sanchi, MPE Sarnath, MRE Bairat, MRE Maski, MRE Brahmagiri, MRE Siddapur, MRE Erragudi, RE Erragudi, Cave Ins. Barabar, Slab Ins. Bhabru and MRE Gujjara.

Sometimes the left vertical stroke tends to become slightly

curved— . This form is found in REG, REK, RED, PEDT and MPE Sanchi

At some places we notice an angular shape— . This is found once in REK and once in RED. This form is undoubtedly due to the fancy of the engraver. In RED-IV-2, we notice once in the word *Bhelighoso* the straight shape— , whereas in the same line, in the word *Dhammaghoso*, it appears in the standard shape— . It is noteworthy that this angular shaped *Gha*— —is in the transition to the *Gha* of later inscriptions, where the left vertical line tends to become short.[1]

Ca

Since the letter *Ca* is very frequent in the Aśokan inscriptions, we find a large number of forms of it. The most prevalent shape, found throughout, possesses a small semi-circle to the left of a straight vertical line— . This is the most artistic shape of the letter and the commonest. There is hardly any inscription of Aśoka where we do not find this shape (For details see Appendix No. 11).

Varieties in the shape of the letter occur only in respect of the different formations of the lower loop. We notice this

1. See—Jain Inscriptions of Mathura—*E. I.* Vol. II, No, 4, p. 899; Mathura Slab Ins. of Huviṣka year 28—*JBORS*—Vol. XVIII (1932). p. 4; Hāthīgumphā Cave Ins. of Khāravela—Sircar : *Select Inscriptions*, p. 206.

shape— ꟈ —which occurs in REK, REJ, PELA, MRE Siddapur and MRE Erragudi, and is evidently due to the influence of a hurried style. In the MRE Erragudi, which is most carelessly engraved, the lower loop becomes a circle — ꟈ — and the letter looks like *Va*. The loop in the letter is a distinctive feature and is always attached to the left of the vertical line. But when it appears to the right of the vertical line, the letter becomes *Va*, not *Ca*. The engraver of the MRE Erragudi was either very careless or illiterate, so once he placed this loop to the right of the vertical line— ꟈ (in line 23).

The semi-circular form of the loop sometimes tends to become large, with the upper vertical short— ꟈ . This shape can be seen in REG, REK, RED, SREJ, SRED, PEDT, PEDM, PELA, PELN and PER. This loop at some places in REG, REK, RED, SRED, SREJ, PELN, PER, MRE Brahmagiri, MRE Siddapur and RE Erragudi takes the shape of a triangle— ꟈ . Sometimes this loop is a square— ꟈ —and can be observed in REG, REK, RED, REJ, SREJ, PER, MPE Queen's and MRE Bairat. There are also some other forms that are due to the engraver's personal style. In one form, the lower portion of the loop tends to become straight and the upper curved— ꟈ ; and in another, the position is reversed thus— ꟈ —, where the upper portion of the loop is straight and the lower is curved. The former shape can be seen in REG, REK, SREJ-I and PELA; and the latter in REJ, PEDT, MPE Sanchi and MPE Sarnath.

General Cunningham has tried to discover the origin of the letter. He thinks that this is the symbol of division or

separation of the two parts, as the word *'chir'* and *'Cheda'* are the roots for slit, split, divide etc.[1] But these postulates are too hypothetical. The first shape of the letter— — which is most common and artistic seems to be the standard form.

Cha

In the letter *Cha*, the semi-circular loop of the letter *Ca* becomes a full circle and a vertical line bisects it in the middle— . This letter is comparatively rare and so has few varieties. Some minor errors due to the engravers' carelessness are apparent.

The most common shape— —can be seen in most of the rock and pillar inscriptions (For details see Appendix No 12). This form seems to be the standard official shape of the letter. When the engraver draws half of the circle first in a some-what elongated form and completes the letter by adding the other half, we notice an irregular shape thus– . This shape can be seen in RED, SRED, REK, REJ, PELA, PER and MRE Rupnath. At some places both the halves tend to become flat and we notice a shape thus— —, which can be seen in SRED-I, REJ, SREJ, PELA, PELN, PER, PE All. Kos.. In REK, we find a peculiar shape, where the semi-circles tend to become two small circles— . This may well be due to the influence of the handwriting of the draft from which the engraver copied, because the form suggests a cursive style.

1, Cunningham : *Inscriptions of Asoka*, p. 56.

Buehler[1] and Ojha[2] draw attention to a variety— ꜵ —found in REK-V-14. This, if established, would be a remarkable anticipation of the Kuṣāṇa script. In fact, it occurs once and the rest of the examples of letter *Cha* are without any upper 'serif'. Close examination of this solitary letter suggests that the mark at the top of the vertical stroke is in fact not due to the engraver, but is probably a flaw in the stone, and hence the serif is not a deliberate design.

The shape of the letter *Cha* underwent very little change in later centuries. It is indeed strange to find that the present shape of the letter in the Devanāgarī alphabet—छ—is very near to its original one. The reason for this may be that the letter *Cha* occurs very rarely in the Indian language, and hence the chances for its evolution were meagre.

Ja

The letter *Ja* in the Aśokan inscriptions usually takes the form of two semi-circles placed one upon another — ɛ.

As its occurrence is very frequent, we find several forms of it. General Cunningham finds a similarity between this letter and *Ya*— ꓕ —, and puts them in one group.[3] But unfortunately he overlooks the different directions of the letters, which is an important feature in their formation. The letter *Ja* faces to the right, while the letter *Ya* faces upward. Moreover, the middle line of the letter *Ya* is always long, whereas in Ja, this is not the case. Cunningham further tries to strengthen this

1. Buehler: *Indian Palæography*, (I. A, Vol. XXXIII—1904, Appendix), P. 7 and 34.
2. Ojha : *Prācīnalipimālā* (Hindi), Plate—II.
3. Cunningham : *Inscriptions of Asoka*, p. 55,

similarity by an arbitrary theory on their origination. He believes that both these characters in the Aśokan alphabet are clearly intended as a representation of the 'mons veneris'; in proof of which he cites the similar forms of the Egyptian hieroglyph for the same member, as well as its common Indian name '*Yoni*.[1] Dr. Buehler thinks that all the forms of *Ja* have been derived from the *Ja* of the Drāviḍī,[2] which appears to have been arbitrary, since no reason is given for it.

The standard shape of the letter — ξ — is prevalent throughout and can be seen in almost all the inscriptions of Aśoka (For details see Appendix No. 13). A shape which looks quite different — ς — is sometimes seen here and there. This shape probably arose when the engraver failed to place the two semi-circles one upon another and joined them by a small curve. Examples of this shape can be seen in REG, RED, REJ, PEDT, PELN, MRE Brahmagiri and RE Erragudi, though very rarely. The carelessness of the engraver is also sometimes manifested when the upper circle appears as an angle and lower as a regular semi-circle — ξ —, or the reversed shape — ξ. The former appears in REG, SREJ and RE Erragudi; and the latter is seen in REG alone. In PELN-V-6, a peculiar shape of the letter is noticed where the lower portion becomes a vertical line curving at the top instead of a semi-circle— ς. At some places in REG and once in the MPE Sarnath, both the semi-circles tend to take the shape of angles thus— Σ.

1. Cunningham : *Inscriptions of Asoka*, p. 55.

2. Buehler : *Indian Palæography* (*I. A.* Vol. XXXIII—1904, Appendix), p. 35.

Once each in REG and REK, we find an angular *Ja*, resembling the letter E of the Roman alphabet— , E . It is noteworthy that this form appears in the Bhattiprolu inscriptions of the Andhra region.[1] Also in later ages, especially during the Kuṣāṇa and Kṣatrapa periods, when a general tendency to angularity developed, a form somewhat like this is noticed.[2] This shape during the Aśokan period was definitely due to the engraver's own style.

The engraver, again due either to his own carelessness or to the mechanical imitation of the draft supplied to him, sometimes draws a big semi-circle and then projects a small horizontal stroke to the right from its middle thus— —, which looks like *Ṭā* (See PELN–V–2). This shape can be seen in REK, SREJ–II, MRE Rupnath and MRE Rajula Mandagiri.

Faithful imitation of the original draft is well illustrated in the group where this letter is written in a hurried style thus— —, which shows that the engraver has tried to carve exactly the same form as he finds in the text. It is very frequent in REK, where the letter *Ṣa* — — is also very common. It appears that, perhaps in order to make a distinction between these two letters, which are very similar in shape, the copyist placed this distinctive round loop in the middle of *Ja*— . In other places, where this form appears, especially in PELN and PER where *Ṭā* occurs frequently, this shape may have been adopted to avoid confusion between

1. *E. I.*, Vol. II, p. 323.

2. See: Nasik Cave Ins. of Vāsiṣṭhī Pulumāvi, year 19, *E. I.*, Vol. VIII, p. 60; Junagarh Rock Inscription of Rudradāman, year 19, *E. I.*, Vol. VIII, p. 42; Sarnath Buddhist Ins. of Kaniṣka, *E. I.*, Vol. VIII, p. 176.

Tā and *Ja*. Sometimes the imitation of the draft is very conspicuous, for instance, in the shape— — where only a small circle is placed in the middle of the bigger semi-circle; or when a small circle is arbitrarily attached to the complete letter thus— . The former shape can be seen in REK and MRE; while the latter appears in PELN and PER. Once in REK, a shape thus— is noticed, which is obviously due to the carelessness of the engraver.

Another shape, with a dot or knob at the end of the middle line— —very frequently appears on the pillar inscriptions and at some places in RED. This shape, we believe, was originated in order to make a distinction between *Ja* and *Jā*. The medial *Ā* is denoted by a small stroke added to the right either at the top or in the middle of a letter, as the shape may be. In letter *Jā*, it is added to the middle. The scribe in order to show this additional stroke puts a dot in the middle. At places we notice that *Ja* is written in its usual form, but when *Jā* occurs, a small dot appears between the middle line of the main letter and the medial sign (e. g. See MPE Lumbini, PER–II and IV etc). Presumably the engravers could not understand these minor distinctions and carved the letters in an arbitrary fashion.

General Cunningham has given a fantastic and fabulous description about this form of the letter. He states that 'the peculiar small circle or dot in the middle of Aśoka *Ja* seems to be directly referred to in the term "*Netra-yoni*", one of the epithets of the moon. This means simply the "eye of the Yoni", which really is in the symbol, and is supposed to refer to the shape of the spots in the moon, to account for which was invented the legend of Soma attempting to debauch the wife of the sage Gautama. The name *Juno*, the goddess of the moon must be connected with the Indian *Jun* with *Junhaiyā*, the moon or

moonlight as well as the Latin "Jubar"[1]. The above interpretation of General Cunningham of course shows his ingenuity and fertile imagination, but it has little relation to the science of palæography, and is only worthy of record as an example of the fantastic theorising which took place when Indian archæology was in its infancy.

Jha

The letter *Jha* in the Aśokan inscriptions is shaped thus— . This form of the letter is most numerous and artistic, and presumably the standard shape of the time. It can be seen in REG, REK, RED, SRED, REJ, SREJ, PEDT, PEDM, PELA, PELN, PER, PE All. Kos. and RE Erragudi.

The occurrence of the letter is not very frequent and hence the chances for variants are meagre. A few different shapes are noticed, which may be accounted for the carelessness of the engraver. A shape wherein the right portion of the letter tends to become somewhat curved— —is noticed in REG and REK. Another solitary shape — —is seen in PEDT. Once in PELA, the left vertical line becomes very long and the right portion of the letter looks too small— .

Ña

In the Aśokan inscriptions, the shape of *Ña* resembles the small *h* of the Roman alphabet— . Its occurrence in the text is limited. It most frequently occurs only in REG,

1. Cunningham : *Inscriptions of Asoka*, pp. 55, 56 and 62.

and it is seen once only in SRED—II, MRE Brahmagiri and MRE Jatinga Rameshwar. Elsewhere it is absent.

Cursiveness is noticed in the letter when the right portion tends to become slightly curved thus— . An irregular shape of letter is also seen when the engraver fails to connect the lower portion accurately with the upper, and both the parts are distinctly seen— .

It is also noteworthy that the lower portion of the letter is always placed to the right of the vertical line. When it is placed to the left of the line, the letter becomes *Bha* (see in REG-VIII, PELN, MRE Rupnath etc.).

Ṭa

The letter *Ṭa* is shaped like a semi-circle and resembles the letter *C* of the Roman alphabet— . We do not find many varieties of the letter, perhaps because of the paucity of its occurrences in the texts. A few different shapes are noticed, which may be accounted for the carelessness of the engraver.

The commonest shape is the perfect semi-circle— —, which appears in most of the pillar and rock inscriptions (For details see Appendix No. 16). This was the standard shape of the letter. In some pillar inscriptions and only once in MRE Rupnath, the letter tends to become less curved and we get this shape— . At some places, the ends of the semi-circle become elongated and thereby this shape is formed— —, which can be seen in PEDT and PELN. On some rock inscriptions, there is another type of the elongated shape, where the upper and lower portions tend to become straight lines— . An

imperfect shape— —is noticed in REG, REK, PEDT, PELA, PELN, PER, MPE Sarnath and RE Erragudi. Some irregular forms also appear where the upper portion is curved and the lower straight— ; or where the position is reversed and the upper portion tends to become slanting— . A shape thus— —is seen once in REG and once in PELA. Another shape in angular style— —appears in PEDM and MRE Rupnath. Obviously these are the corrupt forms due to the engravers' slovenliness.

Ṭha

When the semi-circle of the letter *Ṭa* takes the shape of a complete circle, the letter in the Aśokan inscriptions is *Ṭha*— . This shape appears in almost all the inscriptions, except in REG where it is completely absent in the text, and is replaced by *Tha*.

A perfect circle is usually noticed; but sometimes, perhaps owing to the carelessness of the engraver, the circle has tended to take different shapes, and is not accurate. A shape thus— —is noticed in SRED-II, REJ and SREJ-I. Another form having a somewhat oval shape— —appears in REK, PELA and MRE Rupnath. Once in RED, the circle has taken a shape thus— . The MRE Brahmagiri possesses a very clumsy shape of the letter— .

General Cunningham believes that this shape is a representation of the eye. He also states that 'the symbol would represent roundness in general, and accordingly the cerebral *Ṭha* on simple circle, is a radical name for the disc of the sun, as well as for a circle.' He further presumes that the word "*Ṭhakkura*", a god, was derived from the sun.[1] Obviously these are mere suggestions with little relation to palæography.

Ḍa

The letter *Ḍa* is represented as a horizontal line with two vertical lines at its either ends, the left pointing downwards and the right upwards — ┏┛ . In a perfect shape, all the three lines are of equal length, and this type can be seen throughout the Aśokan inscriptions. An example of perfectly accurate shape can be noticed in MPE Lumbini.

Variants of the shape are noticed in which the lines are irregularly drawn. Once, in REG the vertical strokes are too small and the horizontal line very long— ┏━┛ and conversely in REG and MRE Rupnath, the vertical lines tend to become too long while the horizontal one remains of average length— ┏┛ . At some places in REG, REK, PEDT and PRE, the upper vertical line is short and the lower one is very long— ┏┛ .

Cursiveness, as noticed elsewhere, is observed here also. Dr. Buehler believes that the rounded forms or cursiveness are due to the influence of the Andhra variety of Brāhmī script, which is usually considered to have features of a

1, Cunningham: *Inscriptions of Asoka*, p. 56

later variety. He also points out that the Andhra forms are found in *Ḍa*, which is round.[1] But as already shown, the tendency to cursiveness in the letters seems to have been due rather to the faithful imitation of the draft supplied to the engraver than to any regional influence, though due allowance for the engravers' own style and the material on which the text was engraved should also be made. We have already pointed out that the evidence on which Buehler claimed the northern and southern styles that existed at this time is inadequate and his theory is invalidated by the inscriptions discovered after his death[2].

A slightly curved shape with equal lines — — appears in REG and REK. A similar shape in *Ḍe* — — is noticed in MRE Jatinga Rameshwar. Another cursive shape with its upper vertical stroke short and the lower one long in REK — — has been compared by Buehler with somewhat similar shape of MPE Queen's — —, where both the vertical lines are equal.[3] Very similar to these shapes, another form is noticed in REK where the horizontal line slants slightly upwards— . Some forms with irregular lines — , are found in REK and are presumably due to the carelessness of the engraver.

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1. Buehler : in *E. I.*, Vol. II, p. 448.

2. See above pp. 29-32.

3. Buehler : *Indian Palaeography* (I. A. Vol. XXXIII—1904, Appendix), p. 35.

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very little change during later centuries. It is strange to find a notable similarity between the oldest form and the present letter in the Devanāgarī script—छ. The above shape— — is most artistic and frequent ; and probably it was the standard official form. This shape can be seen on many rock and pillar inscriptions (For details see Appendix No. 20): Another shape, in which the curve is prolonged into a spiral— — is particularly to be noticed in the PEDT-VII. Once in REG, the lower end of the letter is not curved inwards thus— .

At several places in RED, REJ, PEDT, PELA, PELN, PER, MRE Rupnath, MRE Brahmagiri, MRE Siddapur, MRE Jatinga Rameshwar and MRE Gujjara, we notice that the letter has tended to take somewhat angular shape— . This tendency is also noticed when the lower end becomes a spiral thus— , as can be seen in PEDT, MRE Brahmagiri and RE Erragudi.

Some irregular shapes are also noticed here and there, and are presumably due to the carelessness of the engraver. A very straight shape— —, which greatly resembles the letter *Pha*, appears in REG, REK and RE Bombay-Sopara-VIII. Another such erroneous shape is seen in REK, where the letter takes this form— .

It may be observed that the irregular forms such as— ,

—etc. are probably due to the influence of the individual cursive style of the draft from which the engraver copied. The spiral at the end of the letter, or the vertical stroke in place of the rounded lower portion, are variants which might be expected in a rapid handwriting with pen and ink.

Ṇa

The letter *Ṇa* is formed by a vertical line with two horizontal strokes, one at the top and the other at the bottom — . The letter most frequently occurs in REG. At some places, it is completely absent and is replaced by the dental *Na*. The standard shape — — is seen in REG, SRED-II, SREJ-I, Slab Ins. of Bhabru, MRE Brahmagiri, MRE Jatinga Rameshwar, MRE Siddapur and MRE Gujjara.

Irregular shapes are many, and can be noticed here and there. They are all probably due to the carelessness of the engraver. A shape with its upper horizontal stroke slightly curved — — is seen in REG; and another shape where the lower line tends to become slightly curved — — is noticed in MRE Brahmagiri. In MRE Siddapur, we find a shape thus— —, in which it appears that the lower curved line has been carved as two separate strokes, and due to inaccurate designing the two halves of the line have remained distinct instead of forming a simple line. At another place in REG the upper horizontal line is slanting while the lower one is straight — .

Ta

The letter *Ta* is represented as a small vertical line with two forks at its foot— ⅄ . With regard to the origin of the shape of the letter, General Cunningham has suggested that 'its form might have been derived from the hand with outstretched fingers, representing a span or "*Tālah*" or from the spreading foliage of the "*Tāla*" or fan-palm'. He also points out the characteristic root of the letter as "*tan*", to spread or stretch, which is preserved in Greek "teino tanumi" and in Latin "tendo" and "tenuis".[1] Cunningham's derivation of the letter, like his other attempts to trace the Brāhmī letters to pictographic symbols, cannot be substantiated, and now-a-days receives little or no support.

The shapes of the letter as found in the Aśokan inscriptions may roughly be divided into two main groups – the angular and the cursive. The most straight and artistic shape of the letter is the angular form, having both the lower strokes equal, forming an angle of about 90° or less — ⅄ . This shape is most frequent, and can be seen in almost all the inscriptions of Aśoka. An accurate standard form of the letter can be noticed in MPE Lumbini, where it is perfectly carved (For details see Appendix No. 22.)

In another shape, which is very similar to the standard one, we notice a single slanting stroke which is joined in its centre by a small slanting stroke to its right – ⅄ . This shape is also common, and is most frequent in REG (For details see Appendix No. 22). At some places in REK, SRED, MRE Brahmagiri, MRE Siddapur and MRE Gujjara, the position is reversed and the small stroke projects to the left — ⅄ . Sometimes we notice the long stroke slightly curved thus —

1. Cunningham : *Inscriptions of Asoka*, p. 58.

— (see in REG and PEDT). At one place in SRED-II, the letter takes this shape – –, which looks like *Bha*. Obviously these are erroneous forms based on rapid handwriting.

Cursive forms of the letter are many, and are perhaps mainly due to the faithful imitation of the original draft supplied to the engraver. A shape thus — — appears in REG, SRED-I and REK ; and another in a less curved style — —is seen in REG, REJ, SREJ, RED, SRED, PEDT, MPE Sarnath, MRE Sahasram, REK and MRE Gujjara. At another place, the cursive stroke projects to the left — — , which can be seen in SRED—II, SREJ and PELA . Dr. Buehler believes that these forms are due to the regional influence of Andhra.[1] Elsewhere we have pointed out that it is impossible to establish regional varieties of the Aśokan Brāhmī script,[2] so we cannot accept this suggestion.

There are also some forms where the lower portion of the letter tends to become rounded instead of angular. A shape— — is seen in REJ and SREJ—I & II. Another shape where the hurried style is very evident— — appears in SREJ, MPE Sanchi, MRE Brahmagiri, REK, MRE Erragudi, MRE Rajula Mandagiri and RE Erragudi. It is very frequent in MRE Erragudi and MRE Rajula Mandagiri.

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1. *E.I.*, Vol. II, p. 448.
2. See above pp. 29-32.

Ṭha

The letter *Ṭha* is a circle with a dot in the middle— ʘ . This dot in the circle led Cunningham to believe that it is a representation of the eye or the sun, as there is a similar symbol in the Egyptian hieroglyphs.[1]

The above shape is the standard one and appears throughout (For details see Appendix No. 23). A few corrupt shapes are also to be observed here and there; and they are mainly due to the engraver's mistakes. A shape thus— —is seen in REG, SRED-I, SREJ; and another shape, somewhat oval— — appears in REK, SRED-I, SREJ, REJ and PEDM. We find a clumsy shape— —in REG and REK. In MPE Sarnath almost a similar shape is noticed— . Carelessly drawn shapes— , —are seen in REG, REK, SRED, PEDT, PELA, PELN, MRE Sahasram and SREJ-I.

Da

In the Aśokan inscriptions, the letter *Da* is a semi-circle opening to the left with its ends elongated vertically to the top and bottom — . The letter occurs frequently in the texts and so we find several shapes of it. With much diffidence General Cunningham has traced its origin to 'the pictorial representation of a tooth "*danta*", this might have been at first a mere half circle like *Dha*, which was afterwards altered to the Aśoka form by pointing the curve line into two short

1. Cunninghum : *Inscriptions of Asoka* p. 56,

lines attached to the ends of the curve.'[1] But as already pointed out, such views are no longer accepted.

The standard shape— 𑀕 —is most common and can be seen throughout (For details see Appendix No. 24). At some places in REG, REK, RED, SREJ–I and MRE Brahmagiri, we observe that the semi-circle has become somewhat elongated horizontally thus— 𑀕. It may also be noticed that this appears only in the inscriptions on the rocks, probably owing to the fact that there was sufficient space on the rocks which were flat.

At some places the vertical ends become longer. In REK and MPE Kosambi, we find the lower vertical stroke very long — 𑀕 — ; while once, in PELA, the position is reversed and the upper stroke is long — 𑀕 . Occasionally the semi-circle is not exact and sometimes unusually small. A shape thus — 𑀕 — can be seen in REG, REK, SRED—II, PELN, PER, MRE Rupnath, MRE Bairat and MRE Siddapur. There is also an angular shape — 𑀕 —, where the semi-circle tends to become somewhat angular. This appears in REG, SRED—II and SREJ. Another angular shape is one where the semi-circle tends to become an open quadrangle — 𑀕 . It occurs with the other shapes, side by side sometimes even in the same line, e. g. REG—III-1, PER—II-1 etc.. Since this does not suggest a hurried style and since its occurrence is sporadic, we believe that the engraver's own style was responsible for

1. Cunningham : *Inscriptions of Asoka* p. 57,

carving this form. Dr. Buehler is of the opinion that 'from the primary rounded *Da* comes the angular form'[1], although he cites no reason for it. We see no special reason to believe that one form was prior to the other, though the rounded form is simpler to write. It often happens that simpler forms of the letters succeed the complicated ones, but the cases of the reverse process are also found. No conclusion can therefore be reached from the angular form of the letters. There seems to be no regular tendency in the use of the angular forms in the Aśokan inscriptions.

Some other irregular shapes of the letter may be accounted for as the imitation of the hurriedly written text. A shape thus — — is seen in RGE ; while in REK, it has taken this form — . At two places in MPE Queen's, the letter has taken a most hurried shape — . In MPE Sarnath, we find a peculiar formation of the letter — —, which was perhaps due to the engraver's own style, but might equally well be an imitation of a hurried draft. A similar shape is also found in RED—VI-1.

Dha

The letter *Dha* in the Aśokan inscriptions resembles the letter *D* of the Roman alphabet— —, a semi-circle with its diameter to the left. Since the shape of the letter is very similar to a bow with string, Cunningham thought it a pictorial

1. Buehler : *Indian Palæography* (*I. A.*, Vol. XXXIII—1904, Appendix), p. 35.

representation of the *Dhanu*[1], which, of course, is an arbitrary conjecture.

The letter falls into two distinct groups—one, the standard form, having its semi-circle to the right, and the other reversed to the left— , . The standard shape— — is most common and can be seen throughout the Aśokan inscriptions except in SREJ and MRE Gujjara (For details see Appendix No. 25). The letter occurs frequently and so we find several different shapes. A shape where the semi-circle becomes somewhat elongated— —is seen in REG, RED, SRED-I, REK, PEDT, PEDM and PELA. Another shape, where the semi-circle is somewhat extended— —appears very rarely in REG, RED, PEDT, PEDM, PELN and PER. An angular shape thus— —, where the lower end is angular instead of curved, is noticed in REG, SRED and REJ. This is obviously a carelessly designed shape. At some places, somewhat oval forms of the letter— or —are noticed. They are mainly found on pillars, though once in REK, REG and MRE Maski also. This is probably owing to the usual close imitation of the draft supplied to the engraver.

A shape— —is seen once in REG, which is probably due to the inaccurate designing and could have been corrected if the engraver had been more careful. Some examples of inferior craftsmanship are noticed in these shapes— , — which appear in MRE Erragudi and REK respectively.

1. Cunningham : *Inscriptions of Asoka*, p. 56.

The reversed shape— —is very sporadic and can be seen only in SRED-II, SREJ-I & II, PEDT, MRE Rupnath, MRE Maski, MRE Erragudi and MRE Gujjara. It is conspicuous that in SREJ and MRE Gujjara, only this form of *Dha* appears and no standard type can be seen. In other places, the two shapes occur side by side, sometimes even in the same line, e.g. in SRED-I-9, PEDT-VII-13, 22.

It is very difficult to account for the reversed shape. But since the occurrence of this form is very sporadic and it is also noticed with the standard shape; and since the main portion of the letter—the semi-circle—in this reversed shape is unusually turning to the left rather than to the right, unlike the common tendency of the Brāhmī script, we believe that this may be due to the engraver's own style. It is also noteworthy that, in later ages, this reversed form became prevalent.[1]

Na

The letter *Na* in the Aśokan inscriptions possesses a very simple shape of one upright stroke with a slightly shorter stroke at the bottom— . Sometimes both the lines are equal. The standard shape appears very frequently and can be seen in any of the Aśokan inscriptions. Because of its simple shape, we do not find many variants of the letter. A few different shapes are noticed, the reasons for which may either be the carelessness of the engraver or the usual imitation of the original draft.

At some places, we notice the vertical stroke becoming

1. See: Besnagar Pillar Ins. of Bhāgabhadra, Sircar: *Select Inscriptions*, p. 90; Ayodhya Stone Ins. of Dhanadeva, Ibid, p. 96; Nānāghāt Cave Ins. of Nāganikā, Ibid., p. 186, etc.

long and the horizontal one comparatively short— ⊥ . It can be seen in PEDT, PEDM, PELA, PELN, PER, MPE Nigliva, REG and REK. It may also be observed that this shape is more common on pillars than the rocks. Perhaps the vertical position of the pillars gave rise to its frequency. Sometimes the position is reversed, when the horizontal stroke becomes too long and the vertical too small— ⊥ . This shape is very rare and can be seen only in RED and PEDM.

Sometimes, when the engraver was not very attentive, the vertical line slants either to the right or to the left— ⊥ , ⊥ . In some instances, the horizontal line is seen slanting to the left or to the right— ⊥ , ⊥ . Evidently these are engraver's errors and so they are rare (For details see Appendix No. 26). A shape thus— ⊥ —is seen in PER, where it appears that the horizontal line has been carved as two separate strokes; and on account of its inaccurate designing, the two halves of the line have remained distinct instead of forming a simple line. In REG, REJ and PELA, we notice a slightly curved vertical stroke— ⊥ ; while at some other places in REK, PELA, PER and MPE Queen's, the horizontal stroke is slightly curved— ⊥ . Perhaps the usual imitative tendency was the reason for such cursiveness.

General Cunningham thought that it originated from a picture of a human nose with its root *'na'* meaning 'nose' as well as the longer words *'Nak'*, *'Nakat'*, *'Nāsā'* etc. He also

tried to show similarity with the common word *Nemi* or wooden frame for the well-rope.[1] Of course, these assertions are no longer accepted by the scholars.

Pa

The letter *Pa* is one of the most common letters, and occurs in all the inscriptions of Aśoka (For details see Appendix No. 27). Its standard shape is a hook with a straight vertical and lower curve to the right — 𑀧. The other types of the letter are the cursive and angular forms.

In the cursive form, the vertical portion of the letter tends to become slightly curved to the right — 𑀧. This shape is seen in the inscriptions engraved both on the rocks and pillars. It seems, as we have seen elsewhere, that this was due to the usual imitation of the hurriedly written hand.

The angular form of the letter is formed of three straight lines thus — 𑀧 —; but its occurrence is very rare, although it is seen side by side with the other forms. It is difficult to account for its appearance. Most probably, it is the engraver's own style. It is also noteworthy that in later ages, especially during the Kuṣāṇa and Kṣatrapa periods, when an angular tendency in the letters developed, we find this straight shape of the letter with the only modification that the vertical lines are almost equal— 𑀧 .[2] At some places in PEDT and MRE

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1. Cunningham : *Inscriptions of Asoka*, p. 58.

2. See :—Ayodhya Stone Ins. of Dhanadeva : *JBORS*, Vol. X, p. 202 ; Sarnath Buddhist Ins. of Kaniṣka : *E. I.*, Vol. VIII, p. 176 ; Junagarh Rock Ins. of Rudradāman : *E. I.*, Vol. VIII, p. 44 ; Hathigumphā Ins. of Khāravela : Sircar : *Select Inscriptions*, p. 206 ; and others.

Erragudi, the upper portion of the left vertical line slants while the lower portion remains angular— .

General Cunningham has traced its origin, though arbitrarily, to the words *Pāṇi* and *Pad*, the hand and the foot, and says that the original pictorial representation was no doubt a hand, with the five fingers pointed upwards. In course of time the three middle bars were omitted, leaving the symbol in the exact form of the Aśokan letter.[1]

Pha

There is very little difference between the letters *Pa* and *Pha*, the latter differing only in a spiral at its lower end— . The occurrence of the letter in the text is sporadic and so we do not find many variants of it. The standard shape, with its vertical portion straight — — is most common (For details see Appendix No. 28). Sometimes a cursive form is seen in REG, REK, SREJ, PEDT and RE Erragudi, where the vertical portion tends to slant slightly— . In REK and MRE Erragudi, we find a shape thus — —, which appears like *Ḍha*. Obviously this is an engraver's error.

1. Cunningham : *Inscriptions of Asoka*, p. 57.

Ba

The letter *Ba* is a square in shape — □ —, which appears throughout the Aśokan inscription (For details see Appendix No. 29). Sometimes when the letters are not equal in length, the square becomes a quadrangle. At some places in REG, REK and MRE Maski, the vertical lines are longer than the horizontal ones and the shape is thus— ▯ . When the angles curve, a clumsy shape of the letter— —can be seen in REG and MRE Siddapur. This may be due to the imitation of a hurriedly written text of the draft. Similar irregular shapes of the letter— , — are seen in REK, and they are perhaps due to the carelessness of the engraver.

The square shape of the letter led General Cunningham to believe that its verbal roots are '*bās*', a house '*bāri*', a window, "*bārī*", a garden or courtyard, and a "*berrā*", a boat.[1] But like his other statements, this also seems to be an arbitrary one.

Bha

The most common form of *Bha* as noticed in the Aśokan inscriptions is like *Ḍa* with an additional vertical stroke parallel to the lower one to its right— . This is the standard shape of the letter which occurs in almost all the inscriptions (For details see Appendix No. 30). An exquisite example of the letter can be seen in MPE Lumbini.

1. Cunningham: *Inscriptions of Asoka*, p. 57.

A curved shape— —appears in REG, REK and RE Erragudi, and is probably due to the imitative tendency of the engraver. Another similar cursive shape is seen in MPE Sarnath— —, where both the bends are curved and the right lower vertical stroke is longer than the left one.

Owing to the inaccurate designing of the letter, we notice a shape in REK and PEDT thus— —where the upper vertical tends to slant to the left. And at another place, we notice the right lower vertical placed very close to the upper vertical, and the two lines, though distinct, at first glance look like a single line— . This tendency is taken still further in another type of the letter, where the upper vertical and the right lower vertical strokes become a single line— . This shape appears rarely side by side the standard shape, and can be seen in REG, PELN, MRE Rupnath, Cave Ins. Barabar and MPE Sanchi. It was perhaps owing to incorrect draft that was copied by the engraver. It is indeed easier to form this shape than the other when written with pen and ink. It is also noteworthy that this is the shape from which new forms of *Bha* developed in later ages.[1]

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1. See : Besnagar Pillar Ins. of Bhāgabhadra—Sircar : *Select Inscriptions*, p. 90 ; Mathura Stone Ins. of Huviṣka—*JBORS*—Vol., XVIII (1932), p. 4 ; Hāthīgumphā Ins. of Khāravela—*JBORS*—Vol., III, p. 425 ; etc. .

Ma

In the Aśokan inscriptions, the letter *Ma* is represented as a semi-circle placed upon a circle— . This was the standard shape and appears in almost all the inscriptions of Aśoka (For details see Appendix No. 31). Some pillar inscriptions, particularly the MPE Lumbini, possesses the standard artistic examples of the letter. The PEDT (IV–8) shows a flourished form of this letter — . Probably this was copied from a cursive form, which appealed to the engraver's taste.

At several places in REK, RED, SRED, SREJ–II, PEDT, PELA, PELN, PER, PE All. Kos., MRE Maski, MRE Siddapur and MRE Erragudi, we notice a shape— —, where the engraver has carved the circle first and then attached the two almost vertical prongs on it. Sometimes these prongs tend to become somewhat slanting— . These prongs are sometimes slightly curved in PEDT, Slab Ins. Bhabru, MRE Brahmagiri, MRE Siddapur and RE Erragudi, thereby the letter takes this shape — . Some peculiar shapes are also noticed when the engraver probably tried to copy the original text. A shape thus— —is seen in REK, RED, SREJ–II and PEDT; and at another place in MRE Brahmagiri and SRED-I, the upper and lower portions of the letter are detached thus— . In MRE Gujjara, they are slightly apart. In this case, it is noteworthy that an exactly similar shape of *Ma* is seen in the Sohgaura Copper Plate Inscription.[1] Another straight shape is seen in MRE Erragudi— .

1. *JRAS*—1907, p. 510.

The imitative tendency of the engraver is more evident in the letter *Ma* than in any other letter of the Aśokan Brāhmī. Thus we notice these shapes— , — , which are definitely hurriedly written letters. The latter shape— — appears only in RED. Again in REG, we find a shape thus— — where the engraver has failed to imitate the draft and thereby the two upper lines meet beyond the lower circle. At many places, we notice irregular shapes of the letter where the upper lines are not uniform, probably because of being hurriedly written. We find a shape thus— —in REG, RED and PEDT; and again in REG, RED, SREJ-II, PELA and RE Erragudi, it is reversed— . At some places in REG, only the left line is curved— . Most of these shapes seem to have been based on rapid handwriting, and may have been influenced by the drafts from which the engraver copied.

At two places in REK, we find an angular shape of the letter — . This is a rare shape, but it is noteworthy that in the Kuṣāṇa and Kṣatrapa periods, when a tendency of straightness is seen, we find a somewhat similar shape[1].

General Cunningham believed that the letter *Ma* represents the mouth, which is found in the same shape as in the Egyptian hieroglyphs, but the symbol had the value of *Ra* from the term *Ru*, a 'mouth'. Perhaps the original form may have had two

1. See : Junagarh Rock Ins. of Rudradāman—*E. I.*, Vol. VIII, p. 42 ; Mathura Stone Ins. of Huviṣka—*JBORS*—(1932)—Vol., XVIII, pp. 4 ; etc.,

short lines attached to the top to represent moustaches. He has also suggested this form as a pictorial representation of a 'fish' i.e. '*Matsya*', '*Mankā*' of a mongoose or 'ichneumon', of *Makara* or crocodile and also '*Musā*' or mouse.[1] Evidently these surmises are arbitrary and conjectural and hence are of little value to palæographical studies.

It is evident from the presence of this form— —, with the two elements of the letter detached, that originally it was shaped as a semi-circle upon a circle. In the rapid handwriting, however, it is quite clear through the variant forms, that the letter was written without lifting the hand, thus — , , .

Ya

The letter *Ya* occurs very frequently in the Aśokan inscriptions, and so a number of variants are seen. The standard shape is formed thus — —, in which the lower portion has two bends. Another frequent sign for the letter is one where the vertical line meets a semi-circle at its foot — . All the other shapes are more or less the corrupt formations of these two shapes.

The standard shape — — appears in almost all the inscriptions of Aśoka and is most common (For details see Appendix No. 32). Sometimes the lower bends become unusually long — —, which can be seen in RED and PEDT. The

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1. Cunningham : *Inscriptions of Asoka*, p. 57-58.

vertical line is usually of average length, but sometimes in pillar inscriptions it is long (See Appendix No. 32). The reason for this may have been due to the height of the pillar which encouraged the lengthening of the vertical strokes. In general, the letters of the pillar inscriptions are somewhat longer and narrower than those of the rock inscriptions. This we may ascribe to the psychological effect of the tall pillar upon the hand of the engraver. At some places, there are such irregular varieties as — , .

The other main group is that in which the two lower hooks are replaced by a single curve — . The previous type could be written with a pen without lifting from the writing surface— — . On the other hand, it was more complicated to engrave than this' simplified one— . We believe that both the forms were current and inter-changeable, while there is no evidence of regional differences. Though this shape— –is more artistic and common than this– , the latter, being a simplified shape of the letter, was easier to engrave, and perhaps owing to the human tendency to save labour, this shape passed on to later centuries;[1] nevertheless, the former shape with two bends also appears here and there in later ages.[2]

At some places the lower curve is somewhat flattened— . Obviously, the engraver was inattentive in

1. See: Besnagar Pillar Ins. of Bhāgabhadra—Sircar ; *Select Inscriptions*, p. 90; Hāthīgumphā Ins. of Khāravela—*JBORS*—Vol.. III, p. 425 ff. etc.

2. See: Nānāghāt Cave Ins. of Nāganikā—Sircar : *Select Inscriptions*, p. 186 ; Pabhosa Inscriptions : *E.I.*, Vol. II, pp. 242-243; Buddhist Inscription of Sarnath : *E.I.*, Vol. IX, p. 293, etc.

this case. As in the previous group, so also in this form, we sometimes find the vertical line lengthened— . The engraver sometimes appears to have been slipshod as is seen in such shapes— – or this incomplete one— . At some places, we notice that the engraver has completed the latter shape and the letter takes this shape— (For details see Appendix No. 32). Sometimes the engraver has omitted to join the vertical stroke to the curve, with the result both the parts remain separate— . This suggests the imitation of a hurriedly written script.

Another shape resembles an arrow with the lower portion in a pointed form— . It appears very rarely; and only on the rock inscriptions. May this variant have been due to the flat surface of the rocks where an angular shape is easier to carve? (Also compare Cave Ins. of Ramgarh Hill—*A.S-I.* (*A.R.*)-1903-4, Plate XLIII, p. 124, where this shape appears).

While dealing with the letter *Ja*, the view of General Cunningham was that the pictorial representation of *Ya* was a grain of barley or '*yava*', and the symbol was to denote 'union'. We mention this point only to put on record his arbitrary views on the origin of Brāhmī script[1], which, though quaint and interesting, have been practically forgotten.

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1. Cunningham: *Inscriptions of Asoka*, p. 55.

Ra

An undulating vertical line is the sign for *Ra* in the Aśokan inscriptions— . It is only in REG that the letter *Ra* occurs frequently. In many rock and pillar inscriptions, the letter is completely absent and is replaced by *La* or sometimes by *Da* (*Lājā* for *Rājā*; *Tedasa* for *Terasa*). Hence we find many variants of the letter only in REG.

In a standard shape, the line is of an average length; but sometimes it is unusually long (e. g. in MRE Brahmagiri —). A standard shape— —can be seen in REG, RE Bombay-Sopara-VIII, MRE Brahmagiri, MRE Siddapur, MRE Jatinga Rameshwar, MRE Erragudi and MRE Gujjara.

When we examine the different shapes of the letter, we notice a tendency to the simplification of the undulating stroke. In one form, we find the upper portion having only two undulating projections and the lower portion a straight vertical thus— —; while in the other, there is only one curve at the top and the lower portion is a straight vertical line— . And finally, at many places in REG, MRE Rupanath, MRE Maski, MRE Erragudi, MPE Sanchi and MRE Rajula Mandagiri, it is a simple stroke— . It is also noteworthy that at other places, in REK and MRE Sahasram, the vertical line is used as a punctuation mark, though in an apparently arbitrary fashion, but fortunately no *Ra* occurs in those texts. This simplification of the letter had a lasting effect in later ages when we find a simple vertical stroke as a sign for *Ra*, But at some places the undulating line also appears even at a later age, for example in the Besnagar Pillar Ins. of Bhāgabhadra.[1]

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1. Sircar ; *Select Inscriptions*—p. 90.

La

The standard form of the letter *La* in the Aśokan inscriptions is shaped thus— — , and can be seen in almost all the inscriptions (For details see Appendix No. 34). Another is the cursive one, where the vertical stroke tends to become slightly curved— . This shape is rare, but appears both on the rocks and the pillars (See Appendix No. 34). This is obviously due to the hurriedly written script.

A few other shapes are also noticed here and there, in which the lower hook takes various forms. In REG, REK, REJ, SREJ and PELA, it is shaped thus— — ; whereas in PE-DT and RE Erragudi it appears thus— . Perhaps these shapes existed in the original drafts, written by a hurried hand.

We also find another shape which we may call an angular one, as the lower bend is carved in an angular style, thus— . This shape is very rare, but appears side by side with the other forms, sometimes in the same line (e. g. REK-I-2 ; PELA-I-1) ; and on the pillars as well as on the rocks. It is also noteworthy that in later ages, when straightness in the formation of the letters developed, we notice more or less similar shapes of the letter.[1] What accounted for its appearance is difficult to say. Probably it was the engraver's own taste that brought about this form.

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1. See : Mathura Jain Inscriptions—*E.I.*, Vol., I, p. 395 ; Ibid., Vol., II, p. 202 ; Ibid. Vol., I, p. 388 ; etc.

Va

The letter *Va* in the Aśokan inscriptions is represented as an upright stroke upon a small circle — . General Cunningham assumes it to be a *Vīṇā* or 'Indian lute' as a pictorial representation of the letter. He also further thinks that perhaps the Indian symbols included straight lines with a single knob at the end; and if so, it would be connected with *Va* and *Vāhu*, an arm, '*Vena*', and '*Vansa*', a bamboo, '*Vindee*,' a drop of water (by which he presumably meant *Vindu* ?), and '*Vāṇa*', an arrow.[1] Evidently enough, the above statements are based on conjectures and have little relation to Palæography.

In the standard shape of *Va* — — the vertical line is of average length, but sometimes, particularly on pillars, it is somewhat elongated (e. g. see: PELA–I–1; MPE Queen's-2 in *vate*; MPE Sarnath-8, 9; MPE Lumbini-in *Devānaṃ*; MPE Nigliva–2, in *Vaḍhite*; etc.). The reasons for this may have been the vertical shape of the pillar.[2]

There are many instances where the circle becomes somewhat oval in a vertical direction, which is mainly due to the inaccurate carving — . A large number of forms are also noticed which may be accounted for as due to a hurriedly written style. A shape thus — — is obviously one that can be done without lifting the pen. It is very frequent when accompanied with the medial vowels, especially with *Ā* (see: REG–I–6, II–1; RED–XIV–1; REK–IV–11; etc.). Probably the fact that Brāhmī was written from left to right a circle was replaced by a loop to the right of the vertical stroke when written hurriedly. Sometimes a perfect circle is seen placed to the right of the bottom of line instead of in the

1. Cunningham: *Inscriptions of Asoka*, p. 58.
2. Compare the letter *Na*, and see Appendix No. 26.

centre — ϸ . This shape is naturally rare and can be seen only in REK, MPE Queen's, MRE Rajula Mandagiri and MRE Erragudi. A clumsy shape thus — ⅃ —appears in REG and REK, which clearly shows the carelessness of the engraver.

In REG the circle appears as a square when in conjuction with *Da*— ʔ . In MRE Erragudi, it appears independently also. This conjunct is read as $D+B=Dba$ (not *Dva*) by Hultzsch and others[1], but we are of the opinion especially in view of the occurrence of a square *Va* at MRE Erragudi, that the conjunct was intended to be read as *Dva*. To the best of our knowledge *Dba* for 'two' is not attested in any other inscription or in any known Prakrit dialect. It seems that the engraver's own taste led to the formation of this shape.

Again, once in REK, we find the circle transformed into a triangle — ⅄ —, which may be accounted for the same reason. It is noteworthy that in later ages, especially during the Kuṣāṇa and Kṣatrapa periods, this triangular shape comes in vogue, although with a smaller vertical.[2] Sometimes both these shapes—with a circle or with a triangle—are seen side by side in later inscriptions (e.g. Besnagar Pillar Ins. of Bhāgabhadra[3]). This may have been the transitional period when both the shapes were used.

It should be borne in mind that the circle or the knob of *Va* is usually placed in the centre ; but when it is not, it always

1. Hultzsch : *C.I.I.* Vol., I, p. 4, 7 ; Sircar : *Select Inscriptions*, p. 19, 22.

2. See : Mathura Jain Ins. (New Series No. I.)—*E. I.*, Vol., II, p. 199 ; British Museum Ins. of Kaniṣka—*E. I.*, Vol., IX, p. 240 ; Ayodhyā Ins. of Dhanadeva—*JBORS*, Vol., X, p. 202.

3. Sircar : *Select Inscriptions*, p. 90.

shifts to the right, but never to the left of the vertical stroke, because if place to the left, the letter would become *Ca.* This practice is always adhered to in the Aśokan inscriptions, except at one place in PELA-IV-9 (in *Hevaṃ*) where it is shaped thus — . This is an abvious error, which may be accounted for as being due to the engraver himself or to the person who wrote the draft that was imitated by him.

Śa

The palatal *Śa* occurs very sporadically in the Aśokan inscriptions. Most of its forms are found in REK alone. The standard shape of the letter is like an arrow facing upwards, with its middle line longer than the rest — . This shape can be seen in REK, MRE Maski, MRE Siddapur and MRE Jatinga Rameshwar.

A few other shapes also occur, which are mainly due to the slovenliness of the engraver, or to the usual faithful imitation of a hurriedly written draft. A shape thus — —, in which the middle line is shorter than the other two is noticed once in REK. At some places, the middle line is attached to the right line thus — ; and at others to the left— .

A hurriedly written shape — — also appears in REK. In later ages this shape became prevalent,[1] perhaps the simplicity of the letter was the reason for it.

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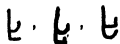
1. See : Rock Ins. of Rudradāman—*E. I.*, Vol., VIII—Plate VIII ; Mathura Inscriptions No. XXXIII—*E. I.*, Vol., I, p. 396.

When dealing with this letter, General Cunningham assumed that 'the palatal *Śa* of Aśokan time is a simple form of the original representation of the human ear. Its shape is that of a parabola with a vertical line or dot in the middle, the latter representing the "meatus auditorious."[1] No dot in the middle of the letter is to be seen; and his whole theory seems to be merely a conjecture.

Ṣa

The carebral *Ṣa* during the time of Aśoka very closely resembles the dental *Sa*. The use of the letter is not very common, but can be seen very frequently in REK-X, XI, XII and XIII only. REK possesses many variants of its shape, which are probably due to a poor craftsmanship.

The standard shape is thus— ⟨letter⟩ —, in which two parallel loops are placed in one line. Besides REK, this shape appears in MPE Queen's also. Hultzsch reads Ṣa in '*vaṣāni*' in the MRE Maski—2, but the letter looks more like a dental *Sa* than a cerebral *Ṣa*.[2] Again in REK-XIV-20, he reads dental *Sa* in '*ṣave*', which appears to be cerebral *Ṣa*.[3] Such confusion is mainly due to the close resemblance of these two letters, not only of their shape but also of sound. The arbitrary use of this letter also makes the problem more difficult. In later Sanskrit inscriptions such linguistic confusion as this is hardly possible.

In some places, the lower curve is attached below the upper curve thus— ⟨letter⟩. Another carelessly drawn form—

1. Cunningham : *Inscriptions of Asoka*, p. 60.
2. Hultzsch : *C. I. I.*, Vol., I, p. 174.
3. Ibid., p. 49.

— is noticed in REK-X-28 (in *ṣavaṃ*).

In MPE Sarnath, this letter appears only once, but the engraver has carved it distinctly in a different style where the upper portion of the letter curves to the left— . A similar shape is also seen in the line below REG-XIII.

We also find cases in which the lower left curve is ill-formed and tends downwards slantingly— . A shape with upper vertical curved— —is also seen in REK. In some instances, we notice such shapes which are no doubt inaccurately designed— , , (For references see Appendix No. 37).

Another shape of *Ṣa*, very near to *Sa*— —is also noticed here and there in REK. This is distinguishable only when the lower loop is carefully examined.

Sa

The standard shape of the dental *Sa* in the Aśokan inscriptions is like *Pa* with an additional hook pointing downwards attached to the left— . The two curves, one up and the other down with a short stroke attached to them led General Cunningham to postulate, though arbitrarily that 'the whole represents pictorially both a serpent with single coil and a complete wave with its hollow and its crest. Now

the radical word for this letter is *Sa* or "*sarpa*", or a serpent, which was probably the original picture of the symbol."[1] This shape of *Sa*— — is most frequent and can be seen in almost all the inscriptions of Aśoka. The MPE Kosambi shows poor craftsmanship, and there the letter is carved very carelessly — . In this shape the left curve has lost much of its curvature and is extended into a tail. At several places the left curve has been transformed into a small slanting dash— , (For details see Appendix No. 38).

At some places in REG, REK, RED, SREJ, PEDT, PELA, PELN and PER, there is a shape in which the engraver has made the right lower curve angular while the left remains cursive, thus— . The occurrence of this shape is very rare and appears to be a slip made by the engraver. Similarly in PELA, PE All. Kos., MRE Bairat and MRE Erragudi, we notice the reversed position in which the left curve is angular and the right one cursive— . This shape is also equally rare.

At some places we find a shape in which the left curve has become somewhat longer and takes a deeper bend thus — . This form is very similar to the cerebral *Ṣa* and so creates a great confusion. Fortunately instances of it are very few, (see Appendix No. 38).

Another form of this letter may be called cursive because the vertical stroke is slightly curved at its top thus — . This shape is an example of a hurriedly written style. Though

1. Cunningham : *Inscriptions of Asoka*, p. 60

the instances of its occurrences are not many, it can be seen both on the pillars and on the rocks, (see Appendix No. 38). As in the previous group, so here we notice that the lower left curve occasionally becomes a simple slanting dash — .

Ha

The shape of the letter *Ha* in the Aśokan inscriptions is like *Pa* with an additional dash attached below the top of the right vertical stroke — . This is the commonest shape and was evidently the standard, (For details see Appendix No. 39). Another shape with its left vertical slanting — — is noticed in REG, RED, PEDT, PE All. Kos., MRE Maski, REK and RE Erragudi In MRE Maski-5, in the word *hevaṃ*, a peculiar shape is seen thus — . It appears that here the engraver mistakenly started to carve *Va*, but later, when he realised his error, corrected it to *Ha*.

In order to save labour, a tendency to simplify the forms of the letters is manifested in the course of engraving or writing. This feature is in evidence in the second form of the letter, in which the dash is attached to the top of the loop instead of to the middle — . It is clear that this form of the letter is easier to write without lifting the pen than the previous group. The engraver copied it as it existed in the draft. This shape is less frequent than that of the former group, but can be seen in most of the inscriptions both on the pillars and the rocks. It is noteworthy that on Separate Rock Edict

Jaugaḍa we find only this group; whereas in other Edicts on the same Jaugaḍa rock, only the former group appears. This fact tends to strengthen our assumption that there was no regional influence in the Aśokan inscriptions.

There are several variants of this group. A shape with slanting of left vertical— —is seen in REG, SRED-II, SREJ-II, PEDT, PEDM, PELA, PELN, PER, MRE Bairat, MRE Rajula Mandagiri and RE Erragudi. At some places the curvature of the dash is noticed both in the straight or slanting left verticals , . In SREJ-I-6, we notice that the dash has become considerably lengthened— . With an angular base, such shapes— , —are also found in SREJ and MRE Erragudi. These forms show tendencies which became regular in later times. Another shape— — is seen exclusively in MPE Kosambi, which is carelessly drawn. Prof. Buehler referred to this shape as 'a somewhat different cursive form'.[1]

While discussing its origin, General Cunningham has remarked that the form of the letter is based on the hand (*hasta*) or the trunk of an elephant (*hasti*) and also the plough (*hala*).[2] However his assertions are no longer accepted since they are merely arbitrary inferences.

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1. Buehler: *Indian Palaeography* (*I.A.* Vol., XXXIII-1904, Appendix) p. 36.

2. Cunningham: *Inscriptions of Asoka*, p. 59

THE MEDIAL VOWEL-SIGNS

The medial vowel-signs in the Aśokan inscriptions show a developed system. It was pointed out by Buehler that 'the other medial vowels [other than *A* and *Ā*] are either the full initial vowel-signs or cursive derivatives from them'.[1] Buehler's conclusions are to some extent correct, especially with regard to *U*, *Ū* and *O*. But the other medial vowel-signs do not seem to be 'cursive derivatives' of their initial vowel letters. Here it may be pointed out that perhaps in the beginning, as Buehler thinks, the system of vowel notation started in the form of a conjunct of vowel and consonant, but later when this was found cumbersome, special diacritical marks were evolved for each vowel letter. The medial signs for *U*, *Ū* and *O* in their full initial forms as found in the Aśokan inscriptions are the reminiscences of the earliest system. These letters could linger longer than the other vowels, because there was not much difficulty in writing them, and they could easily be amalgamated in the conjuncts. The Indian system of diacritical notation to express medial vowels is unique in the alphabets of the ancient world. It was apparently of purely indigenous evolution, and perhaps the Sanskrit grammarians were its originators.

In the following lines we shall be discussing the medial vowel-signs one by one.[1]

Medial Ā

The medial vowel *A*, according to the Indian system of phonology, is inherent in the consonants and so a sign for it is unnecessary. Other vowels have medial signs. The medial vowel of *Ā* is indicated by a short horizontal dash attached to the right, either at the top or in the middle, according to the shape of the letter. When the top portion is vertical, it is attached to the top;

1. Buehler : *Indian Palæography* (*I. A.*, Vol. XXXIII—1904, Appendix) p. 14.

1. Owing to their great frequency and the simplicity of their forms we have not compiled the lists of the occurrences of the medial vowels *Ā*, *I*, *U*, *E*, *O* and *Anusvāra*,

while in the letters with horizontal or curved tops, it is seen in the middle. But in some letters, the sign is arbitrarily attached, sometimes to the top and sometimes to the middle ; in such cases the sign in the middle of the letter seems irregular.

The letters which normally have the sign at the top are :

Kā- , *Khā*- , *Gā*- , *Ghā*- , *Ċā*- ,

Chā- , *Jhā*- , *Ñā*- , *Ḍā*- , *Ḍhā*- ,

Tā- , *Dā*- , *Dhā*- , *Nā*- , *Pā*- ,

Bhā- , *Mā*- , *Yā*- , *Rā*- , *Lā*- ,

Vā- , *Śā*- , *Ṣā*- , *Sā*- , *Hā*- .

The letters *Kha* and *Dha* possess curved tops. The medial sign for *Ā* is normally attached to the top, but at one instance in REG-XIV-3 in *Khā*, the sign is seen in the middle— . In *Dhā*, the sign appears many times just below the top, especially in REG— . In *Ñā*— — the sign could not be placed at the top because of the left top horizontal stroke being as a part of the letter. It has therefore to be placed slightly below the top. As with *Dha*, so with *Ma* the sign is often arbitrarily attached. The right place of the sign is at the top where it most frequently occurs, but such variants also appear as— , , . Instances of such shapes are not many since they are mistakes.

The letters in which the sign is attached to the middle are :

Jā— , *Ṭā*— , *Ṭhā*— , *Ṇā*— , *Thā*— ,

Ba— . In *Jā*, when the medial *Ā* sign is attached to the middle line— —, the vowel mark is not very distinct and the letter is liable to be misread as a simple *Ja*. But at some places, in order to make this distinction clear enough, a small knob appears before the dash for the medial *Ā*— (See MRE Lumbini, PEDT, PELA, PER). And when the letter has a circle in the middle, the sign is always distinct— . Sometimes when the sign is attached to *Ṭā* , it appears like *Ja*. This occurs only when the letter is flat and very carelessly drawn.

Medial I

We have already mentioned the view of Prof. Buehler, who thinks that the medial vowels, other than *A* and *Ā*, are either the full initial vowels or cursive derivatives from them.[1] With regard to *I*, in which no such feature is apparent, he thinks that 'the medial *I* was probably at first expressed by three dots which afterwards were joined cursively by lines and connected into the angle used in most of the Aśokan edicts'.[2]

Two types of medial *I* are seen in the Aśokan inscriptions. The first is the angular form — —which is the most prevalent, and the other is a hurriedly written form — . The sign is

1. Buehler : *Indian Palæography* ((*I.A.*, Vol. XXXIII-1904, Appendix), p. 14.

2. Ibid., p. 15 ; Buehler : *On the origin of the Brāhma Alphabet*, p. 80.

usually attached to the top in almost all the letters, with the exception of a few which are either round or square in shape where it is placed in the middle of the letter, viz. *Ṭhi* — ,

Thi— and *Bi* — . The same feature is sometimes noticed in *Dhi*, which is a semi-circular — ; the irregularity being probably due the letter's roundness. In the cursive style of this sign, we come across occasional vagaries in *Ni* — ,

Si — , *Li* — , in which the sign is attached not to the top but below the top. This may have been due to hurried writing.

In *Jhi* the symbol is usually attached to the left vertical line— — ; but once it is seen in PEDT–I–7, on its right vartical thus — —, which is perhaps a slip by the engraver.

In *Ṇi*, *Ji* and *Ṭi*, the sign is expressed by a top vertical line placed upon the letter — , , . Obviously, the horizontal top stroke is common to both for the vowel-sign and the letter.

Medial Ī

The medial sign for long *Ī* has been derived from the sign for *I* by adding another vertical stroke which indicates that the vowel is long — . Pt. G. H. Ojha believes that the sign for long *Ī* was written in a different style as seen in *Vī* — — of the Barli inscription of Rajputana

Museum[1], which became obsolete and was replaced by a new sign.[2] Since the above mentioned inscriptian is a solitary instance and the intermediate stages in the development of the sign cannot be discovered, it seems too arbitrary to infer any definite conclusion. The sign itself may have been a mistake by the engraver. Moreover, the inscription itself is of a late origin, which we shall discuss later.

As in the medial *I*, so here we notice both the angular and cursive styles. The angular shape is common everywhere, whereas the cursive one is frequently seen in REG. In PEDT, we notice a slightly different form of the sign, where the upper vertical portion of the letter is extended upwards and another parallel vertical stroke is placed beside it, e.g. *Pī* — , *Ḍhī* — etc.. Sporadic instances of this style are also noticed in some other pillar inscriptions (For details see Appendix No. 40).

Besides REG, the cursive style is also seen, though very rarely, in MPE Queen's, MRE Jatinga Rameshwar, MRE Erragudi, MRE Siddapur and Cave Inscriptions of Barabar. In the cursive form, the right stroke is extended, while the left is attached in between the main letter, e.g. *Nī*— , *Vī*— etc.. In MPE Queen's, line 4, the letter *kī* is written thus— , which resembles the form with extended vertical as noticed particulary in PEDT, but its right stroke is curved.

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1. *JBORS*—(1930), Vol. XVI, p. 67; *JBRS*—(1951), Vol. XXVII—p. 34.

2. Ojha : *Prācīnalipimālā* (Hindi), p. 47.

Medial U

The Medial *U* is expressed by adding a vertical or horizontal stroke to the bottom of the letter. As we have shown above, the view of Buehler that the medial *U* and *Ū* are the initial forms of the letters (,) put below the consonant,[1] is only partially correct, because in nearly every case the letter appears in a simplified form. There is a definite system that was adopted in expressing this medial vowel. When the lower end of the consonant is vertical, the sign is always shown as a small horizontal dash, i. e. only the lower portion of the initial letter *U* ( ). This can be seen in *Ku*— , *Gu*— , *Du*— , *Tu*— , *Du*— , *Bhu*— , *Ru*— , *Su*— . But when the consonant possesses a horizontal or curved or circular end, the sign is invariably the other portion of initial *U*, i.e. a small vertical stroke, as found in *Ghu* — , *Chu*— , *Ju*— , *Ṭu* — *Thu*— , *Nu* — , *Pu* — , *Bu* — ; *Mu*— , *Yu* — , *Lu* — , *Vu* — , *Ṣu* — , *Su* — and *Hu* — . We also find both forms—horizontal and vertical—used side by side in those letters in which the lower portions are not remarkably curved or vertical. These letters are *Khu*— , , *Cu* — , .

1. Buehler: *Indian Palæography* (I. A., Vol. XXXIII—1904, Appendix) p. 15; *On the Origin of the Brāhma Alphabet*, p. 79.

and *Dhu* — D , D . At three places in REK (III—7, 8; IX—26) in *Dhu*— D, and once in RED—III—3 in *Mu* — , the full initial sign is shown. Dr. Buehler could not trace out any system with regard to the expression of medial *U* and he generalised that 'Aśoka's clerks lost the remembrance of the origin of the signs of medial *U* and *Ū*; and that they considered the old forms, which they occasionally used, merely as permissible variants without any special significance'.[1] As a matter of fact, the symbol is a horizontal or vertical dash according to the shape of the letter. This was enough to indicate the vowel *U*, and therefore to use the full form of the initial vowel was superfluous. The sporadic instances where the full shape is manifested are clearly irregular, and may be explained as the survival of the old forms, as suggested by Buehler, no doubt influenced by the regular practice of combining two letters one below the other to form a conjunct-consonant. Sometimes positive mistakes are to be noticed; thus we find in *Khu* a vertical stroke for medial *U* (in which *Kha* is without a knob or circle) in MRE Siddapur-9 — . Buehler attempts to strengthen his view and says that the original forms of medial *U* and *Ū* are diminitive versions of the initials— L, for which he refers to an early Śāradā character, the letter *Pū*— .[2] In our view this adds little force to the theory since the inscription to which he refers is a late one and also he has not been able to point out any intermediate forms.

1. Buehler: *On the origin of the Brahma Alphabet*, p. 79.
2. Ibid., p. 79.

Medial Ū

The occurrence of medial long *Ū* is not very frequent in the Aśokan inscriptions, but a similar system is adopted as in medial *U*. It is expressed by two lines- vertical or horizontal, as the case may be- attached to the bottom of the letter. The letters with two horizontal strokes are *Kū*—, *Ṭū*—, *Dū*—, *Dhū*—, *Bhū*— and *Rū*— ; and those with two vertical strokes are *Khū*— ,*Jū*— , *Ṭū*— , *Ṭhū*— , *Nū*— , *Pū*— , *Mū*— , *Yū*— , *Lū*— , *Vū*— , *Sū*— and *Hū* — .

The letter *Gū*, as we notice with short medial *U*, has both the forms — , , because of indefinite shape of the lower end of the letter.

It is also noteworthy that sometimes the two vertical strokes, instead of going parallel, become slanting and form an acute angle, e. g. *Nū*— . This is obviously a hurriedly written form.

Medial E

The medial *E* is always expressed as a small horizontal dash attached to the left of the letter at its top. But in a few letters whose top portions are horizontal or circular, the

sign is attached to the middle. These are *Te*— , *The*— , *The*— , *Be*— and—*Ne*— . In *Khe*, the sign is attached to the left end of the hook— ; while in *Ñe* and *Je*, it is in the middle of the upper half— , .

The horizontal stroke often tends to become slanting owing to the influence of hurriedly written hand. This can be noticed in *Ke*— , *Khe*— , *Ge*— , *Ce*— , *Te*— , *The*— , *Te*— , *The*— , *De*— , *Dhe*— , *Ne*— , *Pe*— , *Phe*— , *Me*— , *Ye*— , *Le*— , *Ve*— , *Se*— and *He*— . Cursive forms are also noticed here and there, which can also be ascribed to the hurriedly written style. Examples of this style can be seen in *Ke*— , *Te*— , *Bhe*— , *Ye*— and *He*— . (Notice the letter *He* which shows a definite sign of hurried writing).

Other irregular forms are also to be noticed here and there, for instance, in *Me* the sign is attached sometimes above

the lower end— ; and sometimes in the middle— ; while at some places it is below the top— , but usually it is seen at the top— . In the letter *Re* and *Pe* also the sign is sometimes seen below the top— , . Obviously these are the mistakes by the engraver.

Solitary instances of such shapes of *Ge* and *Dhe*— , , are noticed in the Aśokan inscriptions. Where the medial sign is connected with the letter by a short vertical, Dr. Buehler noticed only *Ge*, and on this he commented that the sign like *Ge* perhaps offers still the remnants of hook form of medial *E*, into which the originally super-imposed triangle no doubt was reduced.[1] It appears that in order to show the medial signs, a simplified form of ligature of consonant and vowel was employed during the time of Aśoka; but it is hardly legitimate to trace any reminiscences of the initial vowel *E* on the strength of a solitary instance. In fact these are slips made by the engraver who appears to have first carved the horizontal line too high above the letter, and eventually joined it by a vertical line.

Medial Ai

In the Aśokan inscriptions the initial *Ai* does not appear and the use of its medial sign is also very rare. The medial sign is expressed by attaching an additional horizontal stroke parallel to the sign of *E*, i.e. two small parallel horizontal strokes to the left of the letter, e. g. *Thai*— . The initial *Ai* app-

1. Buehler; *On the origin of the Brāhma Alphabet*, p. 80

ears in the Hāthīgumphā inscription of Khāravela[1] of about 1st. Century B. C. in which the shape is thus— ᐅ. Since the initial *Ai* is the *Vriddhi* of *E*, which is indicated by an additional stroke to the left, its medial sign having two horizontal strokes seems to be an apt and natural expression of the vowel. The same form of initial shape of *Ai* was probably prevalent during the Aśokan period.

In REG, the sign appears at four places with *Cai*– -*Thai*– ; , *Trai*— ; and once in MRE Brahmagiri with *Mai*— . As elsewhere so also here, the influene of hurriedly written style is noticed. It is evident in *Thai*— , where the strokes have slanted upwards. Other examples are not seen, as its use was very sporadic and limited.

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Medial O

The standard sign of medial *O* in the Aśokan inscriptions is formed by attaching two horizontal strokes, one at the top to the left and the other to the right below the left one, e. g. in *Ko*— . It be may noticed that this is exactly like a conjuct of initial *O* ( ) with a consonant, as is distinctly recognisable in all the letters with vertical tops. Since the standard shape of

1. Sircar : *Select Inscriptions*, p. 206.

2. Note seen in MRE Siddapur as Dr. Buchler quotes in his *Indian Palaeography* (*I. A.*—Vol. XXXIII-1940, Appendix), p. 37.

initial *O*— ⌐ — possesses its upper horizontal stroke to the left and the lower one to the right, the medial vowel should also have the same order. But the reversed medial style in which the top is to the right and the bottom to the left —(e. g. *Ko*—) also appears side by side at numerous places. We have already seen that the reversed form of initial *O*— appears only in RED and REJ, the reason for which was probably the stylistic idiosyncrasy of the engraver.[1] The reason for the reversed style in its medial form may also be ascribed to the same fact. The occurrence of this reversed medial sign is quite widespread, as in some letters it occurs at many more places than the standard sign (e. g. in *Ho*), and in some, only the reversed sign is seen (e.g. in *Do*—). The style of Brāhmī-writing from left to right perhaps encouraged its frequent appearance as this is conducive to putting the first line to the right rather than to the left. No regional influence however can possibly be traced as far as this sign is concerned, sinse we notice different styles in different letters even in the same inscription.

In the letter *Kho* the left stroke is attached to the left hook and the right one to the right vertical— ; while in *Jo* it is marked thus— —, in which the right stroke is attached to the middle and the left one to the upper curve. The letter *Ño* is shaped thus— —, in which the reversed form is seen, perhaps because of the shape of the letter, which already possesses a left horizontal stroke at its top. The letter *Dho* has three styles

1. See above initial *O*, pp. 51-54.

thus— , , ; while *Mo* is written in two ways— , . The letter *Bo* also does not maintain any uniformity, and we find these forms— , .

Hurriedly written forms are noticed in many letters when the upper stroke is slanted, e. g. in *Kho*— , *No*— , , *Lo*— , *Ho*— , *So*— . On the other hand, we also find both the right and left lines placed in one line in *Go*— , *No*— , *Yo*— , *Lo*— and *Ho* . The examples of this type are very rare.

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Anusvāra

The sign for the *Anusvāra* in the Aśokan inscriptions is a simple dot placed somewhere in the upper half of the letter to its right, e. g. *Kaṃ*— , *Khaṃ*— , *Jaṃ*— .

In later times the sign proceeds further up and reaches the top where it transforms itself into a small circle. How the dot became a cricle and not the vice versa, as is possible in a hurried style of writing, is difficult to account for; but Prof. Buehler believes that 'if the later small circle is the original form of the *Anusvāra*, and the dot a cursive substitute, the sign may be explained as a mutilated small *Ma*, which has lost the angle

at the top, and has been thus treated like the small vowelless consonant appearing in the inscriptions of the first centuries A. D.'[1] This assumption may be correct but it appears somewhat far-fetched, since it depends on the hypothesis that *Anusvāra* was originally a circle, which later became a dot, and then a circle again. We have, of course, no evidence of the original being a circle. In our earliest inscriptions, we find only the dot.

Owing to the carelessness of the scribe, the dot is not always placed at a proper place. It is sometimes seen somewhat at a distance from the letter, as in *Dhaṃ*— , *Maṃ*— , *Saṃ*— ; while at other places it is placed in the lower half of the letter, e. g. *Kaṃ*— . *Dhaṃ*— , *Ḍhaṃ*— , *Haṃ*— etc..

When the syllable appears with the medial *I* and *U*, the dot is very close to the medial signs. With medial *I*, it is seen to the left of the sign, e.g. *Kiṃ*— , *Ṭiṃ*— , *Viṃ*— , *Hiṃ*— ; while with the medial *U*, it appears either in the lower half of the letter or actually below it, close to the medial sign as in *Cuṃ*— , *Tuṃ*— , *Puṃ*— *Luṃ*- . But we also find instances where *Anusvāra* is not so close to the medial sign and is put at a proper place, as in *Kiṃ*— , *Niṃ*— , *Hiṃ*— , *Tuṃ*— . It

1. Buehler: *Indian Palæography* (*I. A.*, Vol. XXXIII-1904, Appendix) p. 14.

seems that the engraver or the scribe found it easier to place the dot near the medial signs of *I* or *U* and so it is there. The human tendency to save labour also helped in this respect.

Conjuncts

To combine two consonants, the syllables are normally placed one upon another in their natural order without any mutilations whatsoever. The only tendency towards modification noticeable throughout the Aśokan inscriptions is to make both the letters short in order to accommodate them in the limited space. Generally the second letter i. e. the lower one, becomes more shortened than the upper, obviously to avoid the elongation of the conjunct. But instances are not absent where both the letters are carved in their full sizes (e. g. *Tya* in in PELN-VI-3; *Tpa*-in MRE Brahmagiri-4, 6). This was of course possible, only when there was enough space. Occasionally, when both the letters have vertical strokes, a single common vertical stroke serves for both the upper and lower consonants; e.g. in *Kya*— , *Gya*— , *Bhya*— , *Sva*— .

Hurriedly written forms are also noticed, usually in the lower consonants, which become either small in shape or are represented in a mutilated form; for example, *Mya*— *Tva* , *Yva* — , *Sva* — . The letters like *Va* and *Ta*, when placed after any other letter, often lose their upper verticals, e. g. *Pta* (in REG-X-1,4 ; XII-3,5,6) looks like *Pā*— , so also *Sta* appears like *Sā*— .

In conjuncts, the letter *Ra* invariably takes the first place, irrespective of its appropriate position, and is usually inserted in the vertical line of the letter. While discussing this letter individually we have seen that there appears to have been a tendency towards the simplification of the undulating line, which is the standard sign for the letter. The same influence is apparent in the conjuncts also. Sometimes the wavering line is prominent, e. g. in *Kra*— , Dra — ; while at other places it is a simple slanting stroke, e. g. *Tra* (or *Rta*)— , *Rva*— .

Dr. Hultzsch has read at many places an extra upper or lower stroke as a sign for *R*, e. g. in *Tra*— , *Dra*— , *Dhra*— , *Dhru*— , *Pra*— . He has, however, produced no reasons for these readings, which are simply assumptions on his part. When these signs are closely examined, it is evident that no uniformity was maintained in attaching them. The extra stroke sometimes appears at the top, sometimes below and sometimes even in the middle. Its direction also is not definite as it goes at some places to the right, and at other to the left. How can there be so many signs for a particular letter ? For instance, in REJ–I–2, a shape thus— —is read by Hultzsch as *Dra*[1]; while in the next line, the stroke for *R* comes below— . In later ages, the use of *R* is very frequent ; its form in combination is uniform and its sign is very distinct.[2] In all

1. Hultzsch : *C. I. I.*, Vol. I, p. 101.
2. For example see ; Pabhosa Inscriptions : *E.I.*, Vol. II, p. 240.

probability these signs, accepted as *R* by Hultzsch, are errors, mostly on the part of the engraver.

In a conjunct of *Ra* with *Ba* in *Brā* (REG–IV–5, 6), the insertion is seen in the left vertical line (not in the right). Dr. Buehler believes that 'probably this sign goes back to the period when writing went from right to left. Otherwise it ought to stand in the right vertical.'[1] We have seen above that the use of *R* in the conjunct is very irregular (for example *Rva* and *Vra* are always written thus—) and no uniformity is maintained in it. In the ligature with *Bā*, it stands in the left vertical of *Ba*, perhaps because of the medial *Ā* vowel which was attached to the right. Moreover, the theory that Brāhmī was written from right to left, as Buehler suggests, is by no means finally proved.

It seems that similar confusion also existed in the formation of other conjuncts in the Aśokan inscriptions. We find instances of such irregularities in *Tsa*— for *Sta*, *Pta* for Tpa— . For *Vya*, both and (*Yva*) are found. No definite system seems to have been adopted. It is also interesting to note that this kind of confusion is still present in the spelling of some Hindi words, particularly with *Mha* and *Lha* where one letter may be put after another and the vice versa. In Bengali, *Mha* is always written as *Hma* and is distinguished only by its context. Once we find this conjunct in REK–XIII-39 (*Hma* –).

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1. Buehler: *Indian Palæography* (*I. A.*, Vol. XXXIII–1904, Appendix) p. 38.

Numerals

It is not possible to make a complete study of the Mauryan numerals as only four numeral figures are found in the Aśokan inscriptions. They are *4*, *6*, *50* and *200*

The sign for *4* occurs only once in REK—XIII—7, where its shape is a simple cross like *Ka* — +. Pt. Bhagawanlal Indraji believed that 'the oldest sign for it appears to be *Ki*'[1]; while Dr. Buehler dissenting from him states that 'he (Pandit Ji) is mistaken about the phonetic value of the Nāgarī numerals for "four". I think, all the previous signs are intended for *Khka* (X क) i.e. *Jivhāmūlīya* plus *Ka*. There is a form of the *Jihvāmūlīya* which consists merely of a loop attached to the left-hand side of Ka...'[2]. On the other hand, discussing this problem, H. Kern states that 'the device of indicating the number "four" by a cross is so natural and ingenious at the same time, that any comment may be held superfluous'.[3] G. H. Ojha plainly shows that the simple *Ka* is the only sign for *4* in the Aśokan inscriptions;[4] and there he is perfectly correct.

The other figures namely *6*, *50*, *200* are found in the Minor Rock Edicts at Rupnath, Sahasram, Brahmagiri, Jatinga Rameshwar, Siddapur (no *200* here), Erragudi, Rajula Mandagiri and Gujjara. Let us examine these symbols one by one.

The sign for 'six' looks like '*Ja*' with open knot — . This was the most artistic shape, and perhaps was the standard shape from which the modern 'six' of the Devanāgarī — ६ —was derived and with which it still preserves a close similarity. Some other forms, which seem to have been written hurriedly are : , , .

1. *I. A.*, Vol. VI (1877), p. 46.
2. Ibid., p. 48.
3. Ibid., p. 143.
4. Ojha : *Prācīnalipimālā* (Hindi), p. 104.

The sign for *50* is thus— —at all the places except in Sahasram, where it is in a reversed position — . It is difficult to account for these two forms, but some letters in their reversed positions are not unknown in the Aśokan inscriptions (e. g. *Dha* — , *O* —). This shape — — seems to be a standard one, as it is found both in the south and the north; while the other shape— —is but a solitary instance, which may have been a mistake either already existing in the draft from which the engraver copied, or committed by the engraver himself. But Buehler points out that Rupnath shows the form used in the Kṣatrapa and Valabhī inscriptions, while Sahasram gives that of eastern plates and MSS.[1] But it seems that later on both the forms were adopted and became current.[2]

There are as many as three signs for *200*— , , —found in the Aśokan inscriptions. The first shape— —is found in Sahasram and probably in Gujjara [as the sign is not clear]; and the second— —only in Rupnath, while the third— —is seen only in the south, in Brahmagiri, Jatinga Rameshwar, Erragudi and Rajula Mandagiri. With

1. *I. A.*, Vol. VI (1877), p. 155.

2. See Ojha: ***Prācinalipimālā*** (Hindi), Plate LXXIII, where both the forms are shown in the Buddhist MSS. found in Nepal.

regard to the first shape— —, Dr. Buehler has pointed out that 'if the right hand side stroke denoting the second hundred is left out of consideration, it closely resembles the sign for *100* in the Nānāghaṭ inscription and the fifth Gupta sign.'[1] But Bhagawanlal Indraji, on the other hand, has accepted the second sign— —as a sign for 200 and thinks that the former is a mistake arising out of the great resemblance of the ancient forms of *Su* and *A*.[2] We believe that the standard shape for *200* was the former one— —as found in the MRE Sahasram; while the latter is a corrupt form— . It may be explained when the left vertical is elongated thus — → → → . Buehler has rightly pointed out that 'in the Rupnath Edict the common sign for syllable *Su* appears instead, showing however, an unusual elongation of the left hand of the vertical stroke.'[3] He also further stresses that 'the elongation of the vertical stroke serves the same purpose as the side-stroke in the Sahasram figure, i. e. to denote *200*, not 100 ... ... and the fact that the common sign for the syllable *Su* is employed, instead of the differentiated form used in the Sahasram Edict, proves that the engraver knew it to be a syllable and pronounced it as such.'[4]

It may also be pointed out that some confusion arose out of the photo-print and the inked estampage of the Sahasram

1. *I. A.*, Vol. VI (1877), p. 155.
2. Ibid., p. 47.
3. Ibid., p. 155.
4. Ibid., p. 155.

Inscription. When examined closely, the sign for *200* appears in two different forms. In the photograph it is thus— 𐀀 —; while in the inked estampage it looks like— 𐀀 .[1]

Obviously the photographically reproduced — 𐀀 —is the correct shape and has been accepted by Cunningham and Buehler.[2] But Pt. G. H. Ojha has accepted the latter shape— 𐀀 —[3], which is perhaps the result of this confusion.

A third shape— 𐀀 —is a peculiar form and does not have any apparent relation to the other shapes. It occurs only in the Southern inscriptions. But it was probably derived from an original— 𐀀 —by the following process—

𐀀 → 𐀀 → 𐀀 → 𐀀 (100) 𐀀 (200).

It appears that the numeral symbols, especially of higher denominations, were still in a state of flux in the Aśoka's time. And perhaps it was due to this fact that we notice a different shape in the South.

Punctuation

The use of punctuation or inter-punctuation in the Aśokan inscriptions is remarkable, although no regular system is adopted throughout the inscriptions. It seems that the necessity of its use was already realised and practised, but

1. Hultzsch: *C. I. I.*, Vol. I, p. 170.

2. Cunningham: *Inscriptions of Asoka*, plate-XIV; Buehler; in *I. A.*, Vol. VI (1877), p. 115.

3. Ojha; *Prācīnalipimālā* (Hindi), Plate-LXXIV.

it had not yet attained perfection. A plausible reason for not finding any punctuation at all in many of the Aśokan inscriptions, or for its careless and irregular use may have been due to the fact that the text was engraved on a stone where the letters had to be carved slowly, one after another, and thus the context was lost and the punctuation was often remained unnoticed by the artisans, who usually were not very learned persons. Moreover, the Brāhmī script itself did not have any such feature that might help in distinguishing one phrase from another; the necessity of which was later felt and led to the development of the present headline system in the Devanāgarī script.

In the Aśokan edicts, the separation of one word or group of words or phrases from one another, or of one edict from another, is often expressed by leaving some space. A small space is usually seen after the proper names, living objects, dates and similar important words. The name of the King Aśoka, *Devānām Piya Piyadasi Rājā* is usually written either as one phrase, after which occurs a small space (e. g. RED-III-1, V-1 ; REJ-I-3, VI-1 ; REK-IV-9, VII-21, 22, X-27, XI-29 ; PELA-III-1 ; MPE Sarnath-6 ; MPE Lumbini-1 ; MPE Nigliva-1 ; MRE Sahasram-1 ; Slab Ins. Bhabru-1 ; etc.) ; or each word is engraved separately with a small space in between, thus-*Devānāṃpiya-Piyadasi-Lājā* or *Devānāṃpiya-Piyadasilājā* or *Devānāṃpiya-Piyadasilājāhevamāha* (e. g. REK-I-1, II-5, III-6, IV-10, 11 ; VIII-23, IX-24, X-27 ; RED-II-1, VII-1 ; REJ-II-1 ; PEDT-I-1, II-11, III-17, IV-1, V-1, VI-1 ; PEDM-II-1; PELA-I-1, IV-1, V-1, VI-1 ; PELN-I-1, II-1, III-1, IV-1, V-1, VI-1, PER-I-1, II-1, III-1 IV-1 etc.). Small spacing is noticed between *Coḍā, Pāḍiyā, Ketalaputā, Satiyaputā* in REK-II-2. And so also in the Pillar Edict-V at Lauriya Araraj, Lauriya Nandanagarh and Rampurva, the names of the birds, animals and the days such as *Cāvudasaṃ, Paṇṇadasaṃ* are separately written by allowing space between the two words. Similarly in the Slab Ins. of Bhabru, the Buddhist texts are divided by small spacings. The phrases ending with '*ti*' (as

equivalent of Sanskrit *iti*) are often seen to have some spacing after them.[1] After the syllable *Ca*, *Cā* or *Cu* usually a small space is seen.[2] At the end of an edict, if any space remains in the last line, the engraver usually keeps it blank and starts the new edict on a fresh line. This feature is noticed particularly on some pillars[3] and REG and RE Erragudi-V.

These spacings between words or phrases mostly appear in the pillar inscriptions and in some of the rock inscriptions. They are however completely absent in REG, Minor Rock Edicts, PE All. Kos. and MPE Sanchi. It is difficult to account for this irregularity, but it cannot be argued that spacing as punctuation was not in practice.

We notice that in REG, SRED and SREJ, the edicts are separated by long lines drawn all round them. In RED and REJ, the commencement of each edict is marked by a short horizontal dash — . A sign like a bracket —) — indicates the end of an edict in REK; although this is not seen in some of its edicts (e. g. I–3, VI–22, IX–27). The omission is obviously a slip by the engraver. Simple vertical strokes — | —(one of the signs for *Ra*) are present in REK–IX, XI, XII, XIII (not in the south face of XIII), MRE Maski and MRE Sahasram. The use of this sign– | –, later called *Daṇḍa*, does not show any definite system. Of course it must have had some punctuative value, probably indicating some emphasis or accent. Sometimes it occurs after a word or

1. See for example: PEDT-II-10, 11, 16, III-18, IV-13, VII-16, 19; PEDM-III-2, 3; PELA-II-1, 2, 4, III-1, 2, VI-2, 3; PELN-II-2, III-1, 2, 3, IV-4, 11, VI-3, 4; PER-II-1, 3, III-1, 2, IV-2, 4, 5, 9; MPEQueen's-5; MPE Sarnath-6; MPE Lumbini 4; Slab Ins. Bhabru-2, 4.

2. See: REK-II-5, III-8, IV-10, VIII-22, 23, X-25, XII-31, 33, 34, XIII-36, 39, South Face-17; RED-V-5; PEDT-I-6, 7, 8, IV-6, 7, 11; PELN-I-1, 4, 5, V-6; PER-I-3, V-7; MPE Sarnath-9; MPE Lumbini-2; MPE Nigliva-3; Slab Ins. Bhabru-7.

3. See: PEDT-III-22, IV-20, V-20, VI-10; PEDM-I-7; IV-10, VI-5; PELN-I-7, II-5, III-4, V-15, VI-6; PER-IV-9 VI-4.

a phrase or a group of words; while at others it divides even one word (e. g. REK-XIII-35-*athavaśā | bhiśita | śā*). It is interesting to note that this *Daṇḍa* sign is also seen in the Ramgarh Cave Inscriptions[1] and Stone Plaque Inscription of Mahāsthāna.[2] There too the texts are not long enough to establish any system with regard to its use, but there it seems less arbirtary than in the Kalsi edicts. At Ramgarh, the *Daṇḍa* always occurs at the end of the word, while at Kalsi it appears sometimes between the letters of a word.

Corrections

In Rock Edict XIV, Aśoka regrets the incompleteness or distortion of some of the inscriptions, due partly to the error or carelessness on the part of the engraver, the '*Lipikāra*' (*lipikarāparādhena*). Indeed the inscriptions of Aśoka contain mistakes, both in the texts as well as in the engraving. As regards the latter, there are many and of manifold nature. Sometimes they are in the form of erroneously attaching extra medial-signs; for example in PEDT-II-11, in *Ve* of *Apāsinave*, there is a superfluous horizontal stroke attatched to the lower portion — ; so also in PEDT-VI-7 in *Pativekhāmi*. Again in *Me* of PEDT-II-12, a vertical stroke is attached to the bottom — and *Ti* in REG-VI-4 is engraved thus— . In *Pakaraṇa* of REG-X-8, the letter *Ra* looks like *Rā*— . At other places the letters are sometimes incorrectly shaped as in PEDT-VII-26, where in *Pāsaṇḍesu pi me*, the *pi* has been formed like *Ghi* thus— . The engraver appears sometimes to have gone astray and to have forsaken the established system

1. *A. S. I.* (A. R.), 1903-4, p. 124.
2. *E. I.*, Vol. XXI, p. 83.

of writing. The MRE Erragudi is a glaring instance of such carelessness where not only the whole text seems to have been written arbitrarily, but also there is hardly any uniform method in the 'madness of the scribe'. The reverse forms of letters, such as *Dha*— etc. are the other examples of the slovenliness of the engraver.

But efforts have been made to correct such mistakes as far as possible. Letters or syllables, if they could not be engraved or were mistakenly forgotten, are usually carved above the line in small letters (For details see Appendix No. 44). Sometimes they are placed below the line, but this feature is less common (For example see in REK-XI-30, the letter *tā* of *mitā*; and in XIV-20, *te* of *Ghaṭite*). Subsequent insertion between the two adjoining letters is also common. The letter then takes as small a shape as possible in order to be accommodated in the space usually left between the letters. The letter *Na*, consisting only of a vertical and a lower horizontal stroke, required little space and so, when inserted as a correction, (as in REG-V-6 in *Badhanabadhasa*, and in REK-XII-31 in *Savapāsaḍana*) being comparatively smaller, was not reduced to a miniature size.

The striking out of incorrect words by a line is seen in REK-XII-31 where the whole phrase '*ti apaśalahā vā*' is scored out by an undulating line and above it the words '*palapāśḍa galahā va*' are engraved. Obviously the engraver has followed the same method as one adopts when writing with a pen. He was not capable of correcting it by any other means.

Incorrect words and syllables are usually removed by obliterating them. For instance, an obliterated *De* is visible between syllables *Si* and *Ra*, and an obliterated *Vā* between *Rā* and *Jā* in REG-X-1. Similarly in REG-XII-3, the engraver has originally engraved *tasa tasa* but later the first *Sa* and the second *Ta* are scored out; and again in REG-I-5, before *Rājā*, a superfluous *Ra* seems to have been struck out. At many instances vacant

spaces between two letters are noticed here and there. They are due either to a natural fissure in the rock or to erasure. In REG-IV-11, the gap between *Tha* and *Ya* of *Athāya* is probably due to a natural fissure in the stone, while that in REG-V-1, between *Rā* and *Jā* seems an erasure by the engraver. There is also a vacant space between *Hi* and *Ni* in REG-IV-11, which seems to be a deliberate erasure.

It is noteworthy that all these corrections occur only on the rocks except in a single instance of PEDT-VII-17, where a small *Pa* is added in *Anupaṭipajāya*. This indicates that the pillar inscriptions were more carefully engraved than the rock inscriptions and the artisans employed for the pillars were of superior craftsmanship.

CHAPTER V

THE MAURYAN INSCRIPTIONS

In the following pages we shall discuss the individual characteristics of the Aśokan inscriptions as well as of the three Cave Inscriptions of his grandson Daśaratha. We shall try to show their palæographic peculiarities along with the general features which they display. We shall first take the rock inscriptions, followed by the pillar inscriptions and those in the caves.

Aśokan Inscriptions of Girnar

The inscriptions engraved on the rock of Girnar are one of the best preserved of the Fourteen Rock Edicts of Aśoka. They stand on a boulder of the Girnar hill which lies one mile to the east of Junagarh in Kathiawar, 40 miles to the north of Somnath.[1] The inscriptions were first described by Colonel Tod in 1822 when they were discovered in the course of blasting operations in connection with the construction of a causeway.[2] The boulder received partial damage in its Rock Edicts–V and XII. Two fragments of the last portion of Rock Edict-XII were discovered later and preserved in the Junagarh Museum.[3]

The inscriptions consist of two broad divisions separated by a line drawn from the top of the rock downwards The first five edicts are engraved to the left ; and seven (VI to XII) to the right. The Rock Edicts XIII and XIV are engraved below. The edicts are separated by horizontal lines.[4] Below the RE-XIII, there is an inscription— [sa] *rva sveto hasti sarva loka sukhahāro nāma* (the entirely white

1. Cunningham : *Inscriptions of Asoka*, p. 14; Hultzsch : *C.I.I.*, Vol. I, Introduction, p. IX-X.

2. Ibid.

3. Hultzsch : *C.I.I.*, Vol. I, Introduction, p. X.

4. Ibid., pp. 4, 10, 14, 22, 26.

elephant indeed bringing happinees to the whole world), which suggests that the Girnar rock must have borne, like the Kalsi and Dhauli rocks, the figure of an elephant representing the Buddha. The figure was probably destroyed when blasted with gun-powder.[1]

The letters are 1½ inch in height and very clearly and deeply cut.[2] A number of varieties of letters are seen; for instance, *Ra* has five forms, varying from a serpentine line to a straight vertical stroke; and so also the letter *A* has as many as nine shapes (For details see the Appendices of individual letters). This inscription, unlike the other versions of Aśoka's edicts, abounds in errors. Erasures and insertions for corrections are seen here and there. No spacing or punctuation signs, such as we find in other Aśokan inscriptions, are to be noticed. The letters *Śa*, *Ṣa* and *Ṛa* do not appear in the text.

The most striking feature of the style of the script is the formation of letter *Ā* in which the right horizontal bar is always attached to the top— , instead of to the middle— —, which is invariably the case in other inscriptions of Aśoka, except in recently discovered MRE Gujjara.[3] Another noticeable feature is the medial sign of *Ā*, *O* and *E*, when they are added to the letter *Ma*. There they are invariably attached to the middle—*Mā*— , *Mo*— , *Me*— ; and not at the top prongs as in other inscriptions. In the conjuncts *Vya* has always been written as *Yva*— , and similarly *Ṣṭa* is engraved as *Tsa*— .

1. Hultzsch : *C.I.I.* Vol. I, p. 27 (Footnote, 2).
2. Cunningham : *Inscriptions of Asoka*, p. 14.
3. *E. I.*, Vol. XXXI, p. 205.

In spite of these minor irregularities, the REG possesses most of the standard shapes of the letters of its time. The letters are generally straight, although cursive medial signs or vertical strokes are not altogether absent.

Aśokan Inscriptions of Kalsi

A version of the Fourteen Rock Edicts was discovered on a boulder near Kalsi, a town in the Chakrata Tahsil of Dehra Dun district of U. P., about 15 miles to the west of Mussoree, in 1860.[1] The block is 10 feet long and 10 feet high, and about 8 feet thick at bottom. The south-eastern face has been smoothed, but rather unevenly, as it follows the undulatings of the original surface. The main inscription is engraved on this smoothed surface. The deeper hallows and cracks have been uninscribed, and the lines of letters are undulating and uneven. Towards the bottom, beginning with the X Edict, the letters increase in size until they become about three times as large as those of the upper part. Owing either to the enlargement of the letters or to the latter part of the inscription being of later date, the prepared surface was too small for the whole record, which was therefore completed on the left-hand side of the rock. On the right-hand side an elephant is traced in outline, with the word '*Gajatame*' inscribed between his two legs.'[2]

The inscription is roughly and carelessly engraved. The engraver does not seem to have been a good artist; and owing to his inaccurate designing, a number of shapes of one and the same letter occur. The most striking forms are those of *Kha* and *Ja*. The letter *Kha* has a big rounded loop at the bottom— —; while *Ja* possesses a loop in the middle— . A peculiar shape of *Cha*— —not found elsewhere—is also

1. Hultzsch : *C.I.I.*, Vol. I, Introduction, p. XI.
2. Cunningham : *Inscriptions of Asoka*, p. 12.

noticeable. The straight form of *A*— and *E*— — are some of the exclusive features of the inscription. The letters *Ca* and *Gha* are also sometimes seen in their angular shapes— , . From Rock Edict X onwards, the letters become dissimilar in size, and strangely enough, the two letters *Śa* and *Ṣa* occur very frequently. This suggests that another hand had taken part in the work of engraving.

A sign like a parenthesis—)—is used to denote the end of an edict. Another sign of some punctuation value, a *Daṇḍa*— |—also frequently occurs in REK.

The style of the inscription is based on hurriedly written forms, as there are a large number of cursive forms both in the letters and in the medial vowel-signs. We also commonly find considerable variation in the size of the letters even in the same line. The inscriptions engraved on the South Face are better cut than the rest. No use of *Ra* and *Ña* is to be seen in the text.

Aśokan Inscriptions of Dhauli

The Dhauli inscription was discovered towards the close of 1837 in the Puri district of Orissa, about seven miles south of Bhuvaneshwar.[1] The rock has been 'hewn and polished for a space of fifteen feet long by ten in height; and the inscription deeply cut thereon. Immediately above the inscription is a terrace sixteen feet by fourteen, on the right side of which (as you face the inscription) is the fore half of an elephant, four feet high, of superior workmanship, the whole is hewn out of the rock.'[2] The Rock Edicts—XI,XII and XIII

1. Cunningham: *Inscriptions of Asoka*, p. 15. (Perhaps this was a mistake for 1836, as the account was read on 2nd April, 1837— See: *JASB*, Vol. VI, p. 318).

2. *JASB*, Vol. VII, p. 219.

are omitted, but two Separate Rock Edicts compensate for them. The inscription is arranged in three columns. The middle column contains Edicts I-VI and the right column has the Edicts VII-X and XIV; and below them, within the border of straight lines, the Second Separate Rock Edict stands; while the First Separate Rock Edict occupies the whole left column.[1]

The letters of the inscriptions are straight and well cut. The commencement of each edict is marked by a small horizontal dash. A stylistic difference between the Rock Edicts and the two Separate Rock Edicts can be detected when examined closely.

The most striking feature in the Rock Edicts are the reversed forms of *O*— and *E*— ; while the standard form of *Ha* — — is invariably seen. The use of the standard form of *Ya* — —is more common than the crescentic form— . The angular shapes also appear in *Gha* — , *Da* — and *La* — ; but they are very rare. Hurried forms, though not many, can be seen here and there (e. g. the shape of *Ja*— , *E* — — etc.; for details see the Appendices of individual letters).

In the Separate Rock Edicts, only the crescentic form of *Ya* — — occurs, although in SRED-II, it sometimes tends to take an angular form thus— . The letter *E* has only

1. Hultzsch: *C. I. I.*, Vol. I, Introduction, p. XIII.

this shape— △ —; and the letter *Ha* of this form— —, is more common than the standard form— . In the text of the Separate Rock Edicts, no initial *O* occurs but, except in two or three instances, the medial vowel sign for *O* is always placed correctly, which suggests that the original shape of initial *O* is the standard one— (e. g. *Ko* —). The letters of SRED-I are somewhat longer than those of SRED-II.

No *Ra* is to be seen in the text, where it is always replaced by *La*. The letters are very clearly and uniformly cut and the lines usually run parallel and straight.

AŚOKAN INSCRIPTIONS OF JAUGAḌA

The Jaugaḍa inscription of Aśoka are engraved on the face of a 'large high mass of rock facing to the south-east, in the direction of people coming from the sea coast, on the bank of Risikulya river in the Ganjam district of Orissa, about 18 miles north-west of Ganjam town.'[1] The inscriptions are written on three different tablets on the vertical face of the rock. The first tablet contains the first five edicts; the second comprises the next five (VI-X) and the Rock Edict XIV, about one half of which has been utterly lost by the peeling away of the rock. The third contains the two Separate Rock Edicts.[2]

As far as the palæographic peculiarities of the Rock Edicts are concerned, it is interesting to note that they are almost identical in nature with those seen in RED. The most striking similarity is the appearance of the reversed forms of *O* — and *E* — ◁ , and the constant use of the standard shape of *Ha*— . The standard form of *Ya*— -

1. Cunningham : *Inscriptions of Asoka*, p. 17.
2. Ibid.

is also more common than the crescentic one— . As in RED, so also here, the angular forms of *Ca*— *Pa*— and *La*— are to be seen occasionally. The peculiar shape of *Ḍha*— — is identical at both the places. The hurried form of *Ja*— is also found in the both. Finally, each edict in REJ also begins with a small horizontal dash, as we have seen in RED. It is therefore clear that the Rock Edicts, both at Dhauli and Jaugaḍa were engraved on one stylistic pattern, perhaps by the same hand. The difference is noticed only in the thickness of the letters, which is obviously due to the use of different chisels. In RED, the chisel had a thin face whereas in REJ, a broad one was used. The letters are mostly straight and well cut and the lines usually run straight and parallel to each other. No *Ra* is to be seen in the text.

The two Separate Rock Edicts belong to a different style, and they are less carefully engraved.[1] The remarkable feature is the occurrence of a reserved form of *Dha*— —, which does not appear in REJ. The shape of *Kha*— — with a circle at the bottom is more common than that with a knob or dot— . No reversed shapes of *O* or *E* are to be seen. The letter *Ha* has tended to take a very hurried form thus — ;—and

1. Cunnigham : *Inscriptions of Asoka*, p. 19.

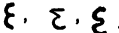
there no standard shape appears. The Separate Rock Edicts are surmounted with straight lines where two Svastikas— , — are engraved before the beginning of the REJ-II. The REJ-I begins with three Maṅgal signs — —and one Svastika .

Aśokan Inscriptions of Sopara

In 1882, Pt. Bhagawanlal Indraji discovered a broken block of basalt bearing six lines of Rock Edict-VIII at Sopara, a large village in the Bassein sub-division of the Thana district of Bombay state, about five miles north of Bassein and thirty seven miles north of Bombay.[1] Another fragment of Rock Edict-IX with eleven lines has recently been discovered, which remains yet unpublished.[2]

The letters of both these fragments are well cut and belong to one group. Most of the standard shapes of Aśokan Brāhmī are used. The letters *Ya* and *Ha* invariably take the standard forms — , . The letter *Ra* is substituted for *Lq* and takes the serpentine form — . The letter *E* also keeps the standard form — .

1. *JBBRAS*, Vol. XV (1883), p. 273; Hultzsch : *C. I. I.*, Vol. I, Introduction, p. XV.

2. Full details are wanting. I am indebted to Dr. D.C. Sircar, Govt. Epigraphist of India, who kindly forwarded to me the photo of the facsimile of the inscription and allowed me to use it. Also refer to : D. C. Sircar : *Inscriptions of Aśoka*. p. 27 ; *Indian Archaeology*-1956-57, p. 73, Plate, LXXXIX—(A).

The newly discovered fragment of Rock Edict-IX is better engraved and more deeply cut than the RE-VIII. The lines are always straight and the letters are uniform in size. But in RE-VIII, a correction is made in line 7 by inserting small letters above the line.

Aśokan Inscriptions of Erragudi

Rock Edicts:

A version of the Fourteen Rock Edicts of Aśoka was discovered in 1929 along with the Minor Rock Edict at Erragudi, some eighty miles north-east of Siddapur of the southern border of Karnool district at a distance of some eight miles from the town of Gooty.[1] The inscriptions are engraved on six large boulders forming the part of a conspicuous eminence in the range of low hills stretching westward from the vicinity of Erragudi village. The inscribed surfaces are rough and badly pitted and no attempt appears to have been made to dress or smooth them, with the result that, except for some engraved on the north face, they are only partially decipherable and that also with greatest difficulty.[2] Rock Edicts IV, V, VII, VIII, X and XI are somewhat better preserved and more distinct. The letters of RE-XIII are broad and appear very close to those of the Minor Rock Edict of this place.

The letters of the inscriptions are usually straight and uniform in size. The standard shapes of the letters are most common, but a hurried hand is also manifested here and there.

The letter *Ja* appears in three forms — , , .

The letter *Ta* tends to take this shape — . Cursive forms

1. A. S. I. (A. R.), 1928–1929, p. 114.

2. Ibid., pp. 161. A facsimile of Rock Edicts IV, VIII and X was published in the *A. S. I.* (A. R.)—1928-29, Plate—LXI; but since then others remain unpublished. I am again indebted to Dr. D. C. Sircar, Govt. Epigraphist of India for supplying me the full set of them and allowing me their use.

occur of *Ta* — , *Pa* — , *Pha* — , *Bha* — , *La* — , *Va* — and *Ha* — . The crescentic form of *Ya* — — is more common than the standard form — . The standard form of *Ha* — — is also not very common. Sporadic use of angular forms is also noticed in *Da* — , *Pa* — , *La* — and *Va* — . Medial signs are usually attached correctly. The sign for *O* has been put in both the ways, e. g. *Ko* — , *No* — ; so also medial long *I* is written in two ways, e. g. *Pī* — , . The medial *Ū* occurs very rarely, and is expressed thus — *Tū* , *Sū* — .

It is strange that no conjunct appears in the text. In RE-I-6, there is a syllable that looks like *Pra* — ; and so also in V-6, a syllable is like *Vyā* — . But unfortunately the letters are not very distinct, and in the absence of other instances of conjuncts in the text, the above readings are very doubtful.

Errors, superfluous letters or corrections are rare. But in RE-IV-14, *Lānājinā* is written for *Lājinā*; and again in line 6, in *Jasa* the letter *Na* is left out, as the word should be *Janasa*. No *Ṟa*, *Śa*, *Ṣa* *Ña* and *O* occur in the text, nor any sign of punctuation is to be seen.

MINOR ROCK EDICT :

The Minor Rock Edict of Erragudi, although best preserved of all the inscriptions found there, is a 'confused mass of writing'.[1] If there is any glaring instance of the engraver's carelessness, it is certainly this inscription. There is hardly any uniform method in the 'madness of the engraver'.[2] The letters are so carelessly engraved that it is difficult to follow the lines, which are at some places hopelessly confused. Out of twenty six lines, as many as eight are written in reverse, i. e. from right to left. Another irregularity is that, when one line is finished, sometimes the next line begins not from the usual place but from a place below the middle of the preceding line and goes upto the end of it, and so the letters of these sub-lines are sometimes mingled with the letters of the next line begun from the usual place (see the Line-Chart of MRE Erragudi). It is also noticeable that there is not a single line running from right to left which covers the full space right through from one end to another. They are rather the mutilated parts of lines.

By noticing the reversed form of writing from right to left in some of the lines, R. B. Daya Ram Sahani believes that 'the inscription leaves no doubt that the "boustrophedon" style of Brāhmī epigraphs was not unknown in the time of Aśoka.'[3] So also, Dr. D. C. Sircar thinks that 'the characteristic of writing from right to left is an old trait of Brāhmī.'[4] Unfortunately, this is a solitary instance of reverse writing in India, and that also in a confused manner, where no uniform system seems to have been adopted. The engraver of the Minor Rock Edict was obviously not the craftsman who engraved the other Rock Edicts at this place. He was very careless and unskilled. Thus it is very difficult to pronounce anything about the style of writing with certainty. Dr. B. M. Barua has suggested that

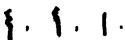
1. R. B. Daya Ram Sahani in *A. S. I.* (A. R.), 1928-29, p. 164.

2. Barua : in *I. H. Q.*, Vol. IX, p. 113.

3. *A.S.I.* (A. R.), 1928-29, p. 165.

4. Sircar : *Select Inscriptions*, p. 52 (Foot-note No. 2).

'the anomaly in the engraving of this inscription might be partly due to the fact that the scribe entrusted with the work was inefficient and careless and partly due to the fact that he was so much habituated to writing the Kharoṣṭhī form of writing from right to left that it was difficult, nay, impossible for him to shake it off even in writing a Brāhmī inscription. The long habit of writing from right to left worked within him by fits and starts, and it could not have operated so virulently if he were not of unusual mind at the time of engraving it or damagingly careless habits.'[1] The carelessness of the engraver is obvious but whether he was thoroughly conversant only with the Kharoṣṭhī script, as Dr. Barua assumes, is difficult to say. Other factors may also have been responsible for this kind of writing.

Some of the letters of the inscription are straight and belong to the standard shape , but many cursive formations are noticed throughout. The letter *Ā* has a corrupt shape thus— —in which the right horizontal stroke is placed above the middle. At another place, it is seen attached to the top— —as we notice in REG and MRE Gujjara. Once its shape is very cursive— . The letter *Ta* invariably appears in a hurried form— . So also, the letter *Ga* is often noticed in this shape— . Cursiveness is also seen in the letters like *Va* and *Ca*— , . At one place, the engraver is so confused that he has engraved *Ca* like *Va*, written in a hurried way— . The crescentic form of *Ya*— — is more

1. *I.H.Q.*, Vol. IX, pp. 114-115.

common than the standard one. The letter *Ra* has taken three shapes— ⌇ , ⌇ , | . Angular forms are sometimes noticed in *Da*— ⌐ and *Pa*— ⊔.

The numeral signs are the same as we find in the southern version of the Minor Rock Edicts at Siddapur, Brahmagiri and Jatinga Rameshwar. The epigraph is not free from mistakes. In its 12th line, the word *Devānaṃ* is engraved twice.

No *Ṇa* is to be seen in the text, as it is replaced by *Na*. The Inscription begins with a triskele symbol— ⅄ , which probably represents the Triratna of Buddhism. The same symbol is also noticed in the minor Rock Edict of Rajula Mandagiri.

Aśokan Inscription of Rupnath

A Minor Rock Edict was discovered on a single flinty rock of dark-red sandstone lying at the foot of the Kaimur range of hills called Rupnath in the Jabalpur district of Madhya Pradesh.[1] The edict is inscribed on the upper surface of the rock, which has been worn quite smooth by people sitting upon it for hundreds of years at the annual fairs. It is now of very dark dirty red colour; and the inscription might easily escape observation. The lines follow the undulations of the rock and are neither straight nor parallel with each other. The inscription is 4½ feet long and 1 foot broad, and consists of six lines of which the last has only five letters.[2]

The inscription possesses most of the standard forms of the letters and they are mostly uniform in size and straightly

1. Cunningham : *Inscriptions of Asoka*, p. 21.

2. Ibid., p. 22.

cut. But the use of the crescentic *Ya*— — and of this shape of *Ha*— — is most common. The letter *Ra* is always expressed as a straight vertical stroke— | . Sometimes angular forms are also noticed in the letters *Da*— and *La* — ; while *Bha* occurs in its straight shape— . A reversed *Dha*— —is also once noticed.

The most noticeable feature is the numeral signs. Unlike at other places, the symbol for *200* is like *Su*— —, which seems to be a corrupt shape.[1] The sign for *50* and *6* are the usual ones— , . No *Ṇa* is to be seen in the text.

Aśokan Inscription of Sahasram

Another version of the Minor Rock Edict of Aśoka is inscribed in an artificial cave on the Chandan Pir Hill, about two miles to the east of the town Sahasram, a sub-divisional head-quarters in the district of Shahabad in Bihar State. The inscription consists of eight lines which are preserved in 'excellent order' except in three or four places where the rock has been peeled off.[2]

The letters of the inscription are well cut in almost an uniform size. But the lines are not parallel and the letters

1. See above pp. 122-125.
2. Cunningham : *Inscriptions of Asoka*, p. 20.

are sometimes above and below the line. Most of the standard forms of the letters are seen. The letter *Kha* has always a circle at the bottom— —and *Ha* is written thus — . But letter *Ya* always appears in its crescentic shape— ; and at two places the crescent looks like an arrow— , as we notice in REK. Most of the letters are usually straight, but cursiveness is also noticed at many places (e. g. *Ta*— , etc.).

The most striking feature is the use of the *Daṇḍa*— | , which occurs in the text at as many as thirteen places. The use of this sign seems to be arbitrary, and its exact punctuation value is difficult to derive. This sign also appears in REK.

Another point of importance is the numeral signs for *200*, *50* and *6*. The sign for *200* is— —, which differs from those found in the south ; while *50* is reversed— , which is probably a mistake. The sign for *6* is the common one— .

At one place, in line 8, a correction is made where the letter *Pi* is inserted just above the line ; but the rest of the text is well carved. No *Ra* is to be seen in the text, as it is replaced by *La*.

AŚOKAN INSCRIPTIONS OF BAIRAT

Two inscriptions were discovered near the town of Bairat, the headquarters of a Tahsil of Jaipur district, Rajasthan. One

of them was the Minor Rock Edict, which was found in 1871 by Mr. Carlleyle about a mile to the north-east of the town, engraved on a block lying separately but immediately below the hill locally known as Bhīma-kī-ḍuṇgari ;[1] while the other was a slab inscription, discovered in 1837 by Captain Burt upon the top of a hill near the village of Bhabru to the south-east of the town.[2] Since the inscriptions differ in their contents and importance, and also vary in their palæographic peculiarities, we shall deal with them separately.

MINOR ROCK EDICT :

The Minor Rock Edict contains only eight lines, which are distorted at many places. The inscription is not a well preserved one, and in appearance it is like a scratching. The letters are not well cut but they are almost uniform in size. The spacing between one letter and another is very irregular. In line 1 and 2, the letters are carved unusually far apart. Most of the letters are straight, but cursiveness is also noticed here and there. A form of *A*— [Brāhmī letter] is peculiar to this inscription. The letter *Ya* possesses only the crescentic shape— [Brāhmī letter] — ; while the letter *Va* is sometimes seen in its most cursive shape— [Brāhmī letter].

Some angular formations are also seen in the letters *Ca*— [Brāhmī letter] , *Da*— [Brāhmī letter] , *Ha*— [Brāhmī letter] and *Sa*— [Brāhmī letter] . A correction is noticed in line 4, where a small *Mi* is inserted just above the line.

SLAB INSCRIPTION OF BHABRU :

The slab inscription is one of the best preserved epigraphs of Aśoka. It is a very well cut piece, and its craftsmanship

1. Cunningham : *Inscriptions of Asoka*, p. 22, 23 ; Hultzsch : *C. I. I.*, Vol. I, Introduction, p. XXIV,XXV.

2. Ibid.

can be compared with that employed in the Pillar inscriptions. The lines are almost straight and the letters uniform.

The inscription possesses most of the standard shapes of the letters. The letter *Ha* is always written thus — ,

and *Ta* has its straight shape only— . The most striking

feature is the uncommon shape of *E*— , which is most common here. No angularity is to be seen except once in

Pa— . No *Ra* appears in the text. The difference

between this and the Minor Rock Edict is very conspicuous in the formation of the letters *Sa* and *Da*.

Aśokan Inscription of Maski

A damaged version of the Minor Rock Edict, in which the name of 'Asoka' occurs, was discovered in the neighbourhood of Maski, a village in the Raichur district of Mysore State. The inscription is engraved on a boulder in a cavern formed of a huge rock. The surface of the boulder has been peeled off at various places, sometimes right up to the depth to which the letters were incised. The inscription measures roughly 8 feet 9 inches by 5 feet.[1]

The inscription is preserved only in eight lines which are very badly damaged at several places. The lines are crooked and the letters vary in size, the largest being 4½ inches in height and the smallest 2 inches.[2] At the top, the letters are more bold than the below. Although most of the letters are of the standard form, cursiveness is noticed here and there (e. g.

1. H. K. Sastri in : *Hyderabad Archaeological Series*, No. I (1915), p. 2.

2. Ibid., p. 2.

Pa— , *Sa*— , *Ga*— , etc.). A shape of *He* in line 6 — — is extremely cursive. Another peculiar formation is that of the letter *Ja* — — in line 3. The most striking feature is the reversed form of *Dha*— —, which occurs invariably, with only one doubtful exception. It is also noteworthy that at one place in line 2, a small thin vertical line is scratched in between two words. Dr. Hultzsch regarded it as a *Daṇḍa* — | .[1] But since this is a solitary instance in this epigraph and the mark is scratched very thinly, this interpretation is likely to be incorrect. This may be an inadvertent mistake by the engraver.

Aśokan Inscriptions of Brahmagiri, Siddapur and Jatinga Rameshwar

Three versions of the Minor Rock Edict of Aśoka were discovered at three places on the hills on the right and left banks of 'Jānagi-haḷḷa' or 'Chinna Heggari' river in the Moḷhalomuru taluq of Chitaldrug district of Mysore State.[2] The inscriptions are found at places known as Brahmagiri, Siddapur and Jatinga Rameshwar. These records mention the name of the engraver (*lipikara*)—Capaḍa. It is also interesting to find that the word *Lipikareṇa* is inscribed at the end of the inscriptions in Kharoṣṭhī, the letters of which, as Dr. Buehler has rightly suggested, exactly agree with those of the Mansehra and Shahbazgarhi versions of Rock Edicts.[3] He also assumes that 'Paḍa [Capaḍa] once served in Northern India where the

1. Hultzsch : *C.I.I.*, Vol. I, p. 174.
2. Ibid., Introduction, p. XXVI, XXVII.
3. *E. I.*, Vol. III, p. 135.

Kharoṣṭhī alphabet prevailed';[1] although no proof is given by him. The word *lipikareṇa* seems to have been written when the engraving of all these three epigraphs was over. The engraver Capaḍa was an artizan, and perhaps did not possess a good knowledge of Brāhmī, though he was efficient in Kharoṣṭhī. It was because of this fact that he had to imitate the script that was supplied to him. The hurriedly written style, which is very often manifested in these inscriptions (e. g. notice this form of *A*— , *Ja*— etc.) attests our assumption. While endeavouring to be faithful in imitating the script, he had elongated some of the letters and sometimes they have taken very crude forms—e. g. *Ma*— , , *Sū*— . The sentence in the end completes itself with '*Capaḍena likhite*', but why the word '*Lipikareṇa*' was added in Kharoṣṭhī is difficult to assess. Perhaps, since the word '*likhite*' denotes 'written' (not engraved, as the engraver wanted to imply), a later thought prevailed upon him which induced him to inscribe '*lipikareṇa*' in Kharoṣṭhī, the script known to him, because this word was not provided in the Brāhmī text. Dr. Buehler thinks that 'Paḍa [Capaḍa] was proud of and wished to exhibit his accomplishment. In fact, his winding up with *lipikareṇa* in Northern character reminds one for a trick of school boys, who sometimes sign their books in Greek or other foreign character'.[2]

MINOR ROCK EDICT BRAHMAGIRI :

The best preserved of these three records is that of Brahmagiri which is inscribed on the top of a great boulder of gneiss, at the north-west base of the hill of the same name, at a point called the 'Ganjigunṭe-mūle'. The inscription is cut on the undressed

1. *E. I.*, Vol. III, p. 135.

2. Ibid., p. 135.

horizontal of the rock, which slopes down somewhat at the end of the line.[1]

It consists of thirteen not very regular lines. Half a dozen letters at the beginning of the 6th and 7th lines have been defaced by the lodgement of water in a depression in the stone.[2] The inscription starts with smaller and irregular forms of letters, as if written by shaky hands, till they become straight and separate. The vertical lines of the letters are sometimes unusually long and in some letters they are very conspicuous, e. g. *Ma* — , *Ya*— , *Va*— etc.. But the shape of the letters is mostly standard. The letter *Ha* is invariably written thus — , so also are the forms of *Da* — , *Ca*— , *Ta*— , *E*— etc.. The letter *Kha* has a large knob — , while the letter *Ya* has always a crescentic shape — . Three numeral signs for *200*, *60*, and *6* appear. Only the sign for *200* — — is different from that of the north.

Prof. Buehler is of the opinion that the type of letters of Brahmagiri comes nearer to that of the Girnar version of the Rock Edicts, where in particular we have the same wavy *Ra* and the conjunct *Pta*, which should be read *Tpa*.[3] But unfortunately he has not marked the fundamental palæographical difference in them. The formation of *Ā* — —with top horizontal dash to the right is peculiar to REG, whereas Brahmagiri does not

1. Hultzsch : *C. I. I.*, Vol. I, Introduction, p. XXVII.
2. Ibid, p. XXVII.
3. *E. I.*, Vol. III, p. 135.

have a single instance of it. Only the standard shape— ⅄ — with a dash in the middle can be found. Again, as there existed some confusion in the writing of conjuncts,[1] the conjunct *Pta* is no criterion of similarity at all. As regards the wavy form of *Ra*— { —, which is the standard shape, is not very common in REG, in which other forms also appear including the straight vertical one, which is not at all seen in these epigraphs.

MINOR ROCK EDICT SIDDAPUR :

The inscription stands less than a mile to the west of Brahmagiri, very close to the town of Siddapur. It is inscribed on a ledge, facing south, some way up a rocky group of hills called 'Yanaman Timmayyana Guṇḍu' or the 'buffalo-herd Timmayya's rocks'.[2]

The inscription consists of twenty two lines, but considerable portions have been defaced. Since the engraving is executed by the same person, Capaḍa, the formation of the letters is identical. But there is more uniformity in their shapes. The verticals are not too long. It seems that the engraver has attained some practice and exactitude; and perhaps this was engraved after Brahmagiri. In the Kharoṣṭhī letters, only *Ṇa* is distinct; while among the numeral signs, only the sign for *50* is clear, which is correct.

MINOR ROCK EDICT JATINGA RAMESHWAR :

The third Minor Rock Edict is engraved on the western summit of the Jatinga Rameshwar hill, which is some three miles or more north by west of Brahmagiri. The inscription is cut on a very irregular slanting horizontal surface of rock, which has been quarried at some period. The floor on which the inscription is cut is immediately in front of the stairs

1. See above pp., 119–121.

2. Hultzsch ; *C.I.I.*, Vol. I, Introduction, p. XXVII.

leading up to the Jatinga Rameshwar temple. Consequently all pilgrims to the shrine used to walk right over the inscription, and no doubt did for centuries,[1] therefore, the inscription is badly damaged.

A vertical line is seen on the left margin of the inscription, which apparently shows the direction of the line. The inscription consists of 22 lines, but the letters are distinct only after the 13th line. They are of the same size as found in Siddapur. No other special peculiarity can be noticed except that the lines are more straight and parallel. Among the Kharoṣṭhī letters—*pikareṇa* is clear. The numeral symbols are much damaged, but can be recognised.

Aśokan Inscription of Rajula Mandagiri

Another version of the Minor Rock Edict was discovered recently in a village called 'Rājula Maṇḍagiri' in the Karnool district, which lies at a distance of about 20 miles from Erragudi where the other edicts of Aśoka were discovered. A temple of Rāmaliṅgeśvara stands on the rock on which the inscription is engraved. The epigraph is incised on the surface of the rock at a distance of about ten yards from the entrance of the temple.[2]

The inscription consists of 15 lines, but the preservation of the text is extremely unsatisfactory. There is no line in which a number of letters are not damaged; and so, most of the sentences are fragmentary. The lost portions can be restored by the help of an almost identical copy found at Erragudi.[3] A close examination of the epigraph will show that some striking similarities exist between these two inscriptions in their formation of letters.

Both the inscriptions begin with a triskele symbol— —,

1. Hultzsch : *C.I.I.*, Vol. I, Introduction, p. XXVII.
2. *E.I.*, Vol. XXXI (Part V, No. 28), p. 212.
3. Ibid., p. 212.

which probably represents the *Triratna* of the Buddhists. The forms of the letters *Ta*— , *Va*— , *Sa*— and *A*— —are exactly identical. The cursiveness is very much the same as we notice in MRE Erragudi (e.g.—*Ha* , *Pa*— etc.). The conjuncts *Gya*— . *Pta*— and *Rpa* [Pra]— are written almost in one and the same manner. The numeral signs for *200*, *50* and *6* are somewhat unusually wide apart but belong to the same group of the MRE Erragudi. The similarity is so striking that one must assume that either the engraver was one and the same person, who in this instance had forsaken the style of writing from right to left; or the draft used in these two inscriptions was prepared by one person which was copied by the engraver.

ÁŚOKAN INSCRIPTION OF GUJJARA

At Gujjara, a hamlet in the district of Datia of Madhya Pradesh, about 11 miles to the south-east of Datia and 12 miles to the north of Jhansi (U.P.), another version of the Minor Rock Edict was recently discovered on a hill locally known as Siddhō Kī Ṭoriyā.[1] This is the second epigraph which mentions the name of 'Asokarāja', the only other being that at Maski.

The inscription consists of five lines only. The letters are carefully engraved, but their preservation is not very satisfactory as some of them are badly damaged and indistinct. Although their formation is very straight, no uniformity is maintained in their size. Some of them possess unusual long

1. *E.I.*, Vol. XXXI (Part V, No. 27), p. 205.

verticals, as sometimes we notice on the pillars, e. g. *Ya*— , *Va* — , *Ña*— , etc.. The most noticeable feature is the appearance of the reversed *Dha*— — throughout the inscription; and the other peculiar form is that of *Ā*, which possesses the top horizontal dash— —, which is otherwise an exclusive feature of the Rock Edict of Girnar. Most of the formations belong to the standard style. The letter *Ya* has often the standard shape— , but once the crescentic form — —also occurs. The letters *Ma*— , *Sa*— , *Ta*— , *Pa*— , *E*— , *I*— etc. have often the standard shapes. Once the letter *Da* appears in an angular form— . A shape of *Ma* with its two portions slightly apart— —is also noticed in line 3, in the word *parakamasa*. The letter *Ba* is always represented in a serpentine style — . Medial signs are the usual ones; but this form of *Ge*— —resembling *Te* is noteworthy. Only one conjunct, *Sva* is used in the text, and is correctly engraved— . Among the numeral signs of *200*, *50* and *6*, only *50* is

distinct— ☐ . The lines of the inscription are almost straight and parallel.

AŚOKAN INSCRIPTIONS OF DELHI

PILLAR EDICT OF DELHI-TOPRA :

A monolithic pillar of pale pinkish sandstone, 52 feet 7 inches in length, of which 35 feet in length has received a very high polish while the remainder is left quite rough, originally stood in a village named Topra, in the Ambala district from where it was brought and set up at Delhi by Sultan Firoz Shah Tughlaq (A. D. 1351-88).[1] It now stands on the three-storied Koṭlā or citadel of Firoz Shah outside the Delhi Gate to the south-east of modern Delhi.

Unlike the other versions of this series, which only consist of six edicts, this epigraph records a seventh, which seems to have been engraved at a later date than those of the six preceding ones. There is a remarkable difference in the formation of letters, and also in the position of the lines, of which the first eleven lines are engraved on the eastern face while the other eleven go round the pillar. Thus the epigraph has two palæographic parts, the first containing the first six edicts and the second the seventh.

The inscription of Delhi-Topra is one of those few records whose letters are very beautifully and distinctly incised. The first six inscriptions are very artistically and nicely engraved. The chisel of the artisan has occupied the exact position and the stroke of the hammer has struck very accurately. There are only a few letters of the whole record that are lost by the peeling off of the stone. The letters mostly take the standard shape and are straight and uniform in appearance. The letters *E* — ☐ ,

1, Cunningham: *Inscriptions of Asoka*, p. 35; Hultzsch: *C. I. I.*, Vol. I, Introduction, p. XV.

I — , *O* — , *Bha* — , *Ya* — , etc. are invariably presented in their standard forms. The letter *Kha* has a filled circle at the bottom — . No crescentic form of *Ya* is to be found in the inscription. The most striking feature is the angular shape of *Da* — —, which is the only regular shape in these six edicts. Another peculiar feature is the mode of attaching the medial long *Ī*, in which the left vertical stretches up from the vertical of the letter itself, e. g. *Dī* — (not thus —). Corrections are made either by insertion or obliteration of the letters. A flourished form of *Ma* — — is noticed in PE–IV–8, which manifests the artistic taste of the engraver.

The palæography of Pillar Edict–VII indicates distinctly a different hand. Cursiveness, which is almost absent in the first six edicts, is a predominant feature of this record. A cursive hand runs throughout its twenty two lines. One notices the cursive formation of *Kha* — , *Pa* — *Pha* — *La* — , etc.. The most striking difference appears in the shapes of *E* — , *Ja* — , *Ca* — and spiral *Ḍha* — . These forms are completely absent in the previous six edicts. The crescentic form of *Ya* — — is also noticed here and

there, and in the usual form of the letter, the two side verticals have become unusually long — . The angular form of *Da* — — is less common than the normal one — ; while angularity is noticed in *Pa* — , *La* — and *Sa*— . (Notice especially the forms of *Pa* and *Sa* where cursiveness is accompanied with angularity). The letter *Ta* is formed of only two strokes instead of three, the longer one sloping downwards to the left and the shorter to the right — . Sometimes cursiveness also follows — . The epigraph is incised with a thin chisel and hence the letters are thinner than the former ones. The artizan does not seem to have been very efficient and careful. Some corrections are also noticed in the text.

PILLAR EDICT OF DELHI-MEERUT :

The other Aśokan pillar of Delhi, according to Shams-i-Sirāj, was brought from Meerut by Firoz Shah Tughlaq and installed near *Kushak-shikār*, or the 'Hunting Palace', which at present stands on the ridge of the north-west of modern city. According to popular belief, as General Cunningham describes it, the pillar was damaged by an accidental explosion of a powder magazine that was situated there.[1] It had five broken pieces, which when put together measure 32¾ feet long.[2] It has again been set up in its position. The inscriptions are therefore very imperfect, partly owing to the worn surface of the existing pieces.

The formations of the letters of the edicts are very similar to those noticed in the first six edicts of Delhi-Topra; in most places they are nearly identical. The most striking similarity

1. Cunningham : *Inscriptions of Asoka*, p. 37.
2. *JASB*, Vol. VI, Part II, p. 795.

is noticed in the angular *Da* — — , which is employed without exception, the standard *Ya* — — and the standard *E* — . The letter *Kha* has here also a filled circle at its bottom — — , while the medial long *I* still maintains the same form as found in the first six edicts of PEDT. The letters are equally straight and uniform and the lines are almost parallel. It seems that both these epigraphs are written by the same hand, as no noticeable difference can be seen in them.

Aśokan Inscription of Lauriya Araraj

A monolithic pillar of sandstone with shining polish stands close to a hamlet called Lauriya Araraj in the Champaran district of Bihar State. Its height above the ground is 36½ feet. It tapers in shape, with its base 41.8 inches in diameter and its top 37.6 inches.[1] The pillar has no capital, although there can be little if any doubt that it must once have been crowned with a statue of some animal.[2] The inscriptions are engraved on two columns, one facing to the south comprising the first four edicts, while the other, facing to the north, contains the fifth and sixth.

The letters of the inscriptions are deeply and neatly cut. The first four edicts facing to the south are more closely engraved than the others. In the first few lines, some letters have unusual elongated verticals, e.g., *Ya*— , *Kha*— ,

1. *A. S. I. R.* (Cunningham), Vol. I, p. 67; Cunningham: *Inscriptions of Asoka*, p. 40.

2. Cunningham: *Inscriptions of Asoka* p. 40.

Na — etc. . The letters *E*— *O*— *Ga*— *Ta* — , *Dha* — , etc. are always in their correct forms. The letter *Ha* always appears in this shape— , while *Ya* takes both the forms — , . The letter *Kha* has either a filled circle or an open circle at its bottom— , . The medial sign for *O* is always attached correctly, i.e. the upper dash to the left and the lower one to the right, e.g. *Ho*— . The medial long *ī* is very distinctly expressed—e.g., *Khī*— , *Mī*— . The most striking form is the shape of *Ja* with a knob in the middle— . This form is very common here. Angularity is also common, as it is noticed in *Pa*— , *La*— and *Sa*— . Although no correction is made in the epigraph, mistakes are to be found. Once in PE-IV-9, the letter *Va* resembles *Ca*— , which is an incorrect form. Five conjuncts occur in the text and they are engraved correctly. They are *Khya*— , *Tya*— *Dhya*— , *Sya*— and *Sva*— .[1] No *Ṇa* and *Ra* are to

1. Cunningham has mentioned a sixth conjunct of *Kkha* in this inscription ; but this is not to be seen in the text. It is a slip by him. See, Cunningham : *Inscriptions of Asoka*, p. 40.

be seen in the text. Punctuation by leaving a space is noticed everywhere ; but no particular sign is to be seen.

AŚOKAN INSCRIPTION OF LAURIYA NANDANGARH

The only inscribed monolithic polished pillar of Aśoka which still retains its original capital was discovered in the village of Lauriya Nandangarh in the Champaran district of Bihar State. The height of the shaft is 32 feet 9½ inches. It is surmounted by a capital in the form of a lion with its mouth wide open ; but the mouth is partially broken. The capital is 6 feet 10 inches high, and its abacus is ornamented with a row of 'Brahmani geese' pecking their food. The shaft also bears the round mark of a cannon shot just below the capital, which has been slightly displaced by the shock. This vandalism is ascribed by Cunningham to the Moghal Emperor Aurangazab, whose name is inscribed on this pillar.[1] The pillar is much thinner and lighter in appearance than that of Lauriya Araraj. The columan bears a light and elegant appearance.

As in PELA, so also here, only six edicts are engraved on two columns, the first four facing to the east and the other two to the west.[2] The letters on this pillar are also equally distinct and very neatly and deeply cut. The western inscriptions are better preserved and more distinct. But the letters are almost of the same size as we find in PELA, some letters in the beginning are usually elongated, e. g. *Ya* — , *Pi* — , *Kha* —

etc. . Most of the letters are straight and belong to the standard type. The letter *Kha* appears in its both the forms with a small knob as well as a small circle at its bottom — ; while the

1. *A. S. I. R.* (Cunningham), Vol. I, p. 73 ; Cunningham : *Inscriptions of Asoka*, p. 41.

2. Hultzsch : *C. I. I.*, Vol. I, Introduction, p. XVIII.

standard form of *Ya*– [Brāhmī character] –is more common than the crescentic one – [Brāhmī character]. The letter *Ha* bears this shape— [Brāhmī character] only. The letter *Ja* has a peculiar shape with a loop in the middle thus— [Brāhmī character]. This form is not noticed in PELA. Other shapes of *Ja* — [Brāhmī character] [Brāhmī character], [Brāhmī character] — also occur in this inscription, but no standard form is to be seen. The letter *Ṛa*— [Brāhmī character] —with a knob at the bottom is used ; but at one place in PE-V-6, the knob is replaced by a detached dot— [Brāhmī character]. The same five conjuncts of PELA occur at this place also. Punctuation by leaving some space between the word, and commencing the edict on a fresh line are noticed in the same manner as in PELA. No *Ṛa* or *Ṇa* are to be seen in the text.

Aśokan Inscription of Rampurva

Another version of the Pillar Edicts of Aśoka was discovered by Mr. A. C. L. Carlleyle in 1877 in the village of Rampurva in the Champaran district of Bihar State.[1] The pillar was found fallen and lying partly in water ; its length was found to be 44 feet 2½ inches. The capital had vanished except the lower portion with circular abacus decorated with geese and conventional flowers. The crowning figure of a lion with damaged mouth was however later discovered by R. B. Daya Ram Sahani, which had originally been fixed to the shaft by a massive copper bolt.[2] The capital and the shaft bear excellent

1. *A. S. I. R.* (Cunningham), Vol. XXII, p. 51 ; *A. S. I.* (*A. R*), 1907 08, p. 181.
2. *A. S. I. R.* (Cunningham), Vol. XVI, Preface, p. VIII.

Mauryan polish. Another pillar with no inscription, but having the same Mauryan polish, was discovered in broken pieces close to this pillar. It was originally crowned with a bull, which was found there.[1]

The inscriptions are engraved in the same manner as on PELA and PELN, in two columns–the first four edicts on one side and the other two on the opposite. The letters of the epigraph are similar to those found in PELN. Most of them are of the standard type, and the letters *E*— , *O*— , *Kha*— , , *Ga*— , *Ta*— are generally straight and correct. The letter *Ja* appears in four forms — , , , . The fourth shape — — appears once in PELN also. Angularity occurs in the letters *Ca*— , *Pa*— , *Da*— and *La*— . The letter *Ha* also appears in the same form as in PELN — , while *Ya* has both the forms — , —, the former being more common. The same five conjuncts of PELA and PELN appear in their correct shapes. The medial signs are also exactly similar to those of PELN.

In the line 6 of edict–V, two curves are placed on each side of the letter *Na* in the word *Punamāsiyaṃ* thus — .

1. *A. S. I.* (*A. R.*), 1907-08, p. 188.

Sir John Marshall believed that the sign conveyed some meaning[1]; but in fact, they are irrelevant marks, since there is no other example, and no possible significance can be suggested from them on the basis of the later development of the Brāhmī script.

AŚOKAN INSCRIPTIONS OF ALLAHABAD

The pillar that now stands in the Allahabad fort was originally erected at Kosambī, the modern Kosam, about twenty eight miles west from Allahabad town in U. P.. General Cunningham has rightly presumed that 'it seems highly probable that it must have been brought to Prayāga by Firoz Shah Tughlaq, whose removal of Sivalika [PEDT] and Mirat [PEDM] to Delhi, gives countenance to this'.[2] The pillar is a single shaft of polished sandstone, 35 feet in length. 'This was once surmounted by a statue of a lion, but the lion must have disappeared many centuries ago, as when the pillar was re-erected by Jahangir in A. D. 1605, it was crowned by a globe, surmounted by a cone, as described and sketched by Padre Tieffenthaler in the middle of the next century'.[3]

Three separate records of Aśoka are engraved on this pillar. They are (i) the Pillar Edicts, (ii) the Minor Pillar Edict of Kosambi or Schism Edict and (iii) the Minor Pillar Edict of Queen Kāluvākī. Besides these Aśokan inscriptions, the famous Allahabad Pillar Inscription of Samudragupta is also engraved on it. An inscription of Jahangir, and one of Birbal, as well as interlineation in Nāgarī characters are also to be seen on it. These later inscriptions have caused great damage to the Aśokan inscriptions. 'The mass of short records in rudely cut modern Nāgarī covers as much space as the two inscriptions of Aśoka and Samudragupta. The whole of the Aśokan inscriptions is interlined with the same rubbish; and a portion of the Third and Fourth edicts, comprising seven lines have been

1. *JRAS*-1908, p. 1087.
2. Cunningham : *Inscriptions of Asoka*, p. 39.
3. Ibid, p. 37.

ruthlessly damaged by the cutting of the vainglorious inscription of Jahāngir, recording the names of his ancestors.'[1]

As the Aśokan records differ in their contents and also in palæography and craftsmanship, we shall treat them separately.

PILLAR EDICTS:

The pillar bears the six edicts belonging to the same group as PELA and PEDT. They are deeply and neatly cut in continuous lines around the pillar. The letters are mostly uniform in size and straight, and belong to the standard type.

The letters *Bha*, *Ja*, *Ta*, *Ya*, and *Ha* are always represented in perfectly correct form. The bottom of *Kha* is a filled circle— . The most noticeable irregularities are the reversed formations of the letters *I* and *E*— , . The appearance of this angular *A*— — is also remarkable as we do not find this form on any other pillar inscriptions. Angularity is sometimes noticed in *Da* — , *La*— and *Sa*— .

Two conjuncts, *Tya*— and *Khya*— — are to be found, and they are correctly formed. No punctuation or corrections are to be seen.

MINOR PILLAR EDICT OF KOSAMBI:

The Minor Pillar Edict or Schism Edict, which refers to the *Mahāmātra* of Kosambī, was discovered by General Cunningham who called it the 'Kosambi Edict'.[2] It is inscribed to

1. Cunningham : *Inscriptions of Asoka*, p. 38.
2. Ibid., p. 38.

the right of the Samudragupta's inscription and consists of only four lines of which the beginning of the second and third is obliterated.

The engraving of this record shows a very careless hand. The formation of the letters is not accurate and at several places looks like scratching. Some of the letters are unusually far apart. We notice a shape of *Sa*— —in which the left curve is prolonged like a tail; and also a peculiar form of *A* is seen in line 1. The letter *Ya* appears in the cresdentic shape, absent in the Pillar Edict; and the crescent also being very large. Cursiveness is to be noticed here and there, e. g., *Pa*— , *Va*— , *Ha*— . Angularity is noticed once in *Pa*— —; while *Kha* has a circle at its bottom— . This record cannot be ascribed to a good hand.

MINOR PILLAR EDICT OF QUEEN :

On the lower portion of the MPE Kosambi, the inscription referring to the grant of the second queen of Aśoka, Kāluvākī, is engraved in five lines. The epigraph is distinct, except a few letters in line 4. The letters are not uniform in size. They also much differ in their shapes from the other two inscriptions on the same pillar. The most peculiar formation is that of the letter *Da*, which either appears in an angular shape- -,or in an extremely cursive-form - . It may be suggested that probably two hands were engaged in the engraving of this inscription. Only the cresentic *Ya*- -

is to be seen, while *E* is written thus— △. Cursiveness is very evident here and there, e. g. *Ḍa*— , *Va*— , *Ti*— etc.. The letter *Ha* is always engraved in a hurried form— . The aspirated *Ṣa* also occurs in the text, and it is correctly written— .

ASOKAN INSCRIPTION OF SANCHI

A version of the Minor Pillar Edict of Aśoka, referring to the schism in the Saṃgha, was discovered at Sanchi, in Madhya Pradesh. The inscription is engraved on a 'fragment of a large polished shaft, but near it there still lies a broken capital crowned by four lions which no doubt once surmounted it'.[1] The inscription is much damaged, and a portion of it is lost. It consists of eight lines only.

The letters of the inscription are well cut and straight, but cursiveness is also noticed here and there. The letter *Ta* appears in two forms — , — , while *Ya* in seen in its crescentic shape — — only. There is a knob at the bottom of *Kha* — —, and *O* is correctly engraved — . The letter *Ha* appears only once in the text and is written cursively — . The lines are straight and parallel. The record being small and damaged, many letters do not occur.

1. Cunningham : *Inscriptions of Asoka*, p. 42.

Aśokan Inscription of Sarnath

A broken pillar of polished sandstone, bearing the Minor Pillar Edict of Aśoka, stands *in situ* at Sarnath, the site of Isipatana Migadāya, the place where the Buddha preached his First Sermon near Varanasi city in Uttar Pradesh. The place was visited by Hsuan Tsang and he marked the spot of the pillar where the Buddha began to "turn the wheel of Law".[1] The pillar was originally crowned with a capital, which was discovered near the pillar, and which is surmounted by four magnificent lions standing back to back. In their middle was originally a large stone wheel, the sacred *Dammacakka* symbol.[2] The lions stand on a drum with four animal figures carved on it, a lion, an elephant, a bull and a horse, placed between four wheels. 'The lion and other figures are wonderfully life-like and the carving of every detail is perfect. Altogether this capital is undoubtedly the finest piece of sculpture of its kind so far discovered in India.'[3] The figure of the capital has now been adopted as the official emblem of the Government of India.

The inscription consists of eleven lines and is a version of the same Minor Pillar Edict which is found at Sanchi and Kosambi. Unfortunately the three top lines are broken away and the fourth is badly damaged. Three inscribed fragments were later discovered, and as Mr. Oertel has proved, they contain two *Akṣaras* of each of lines 1-3 and the end of lines 3 and 4.[4] The rest of the inscription is very well preserved, as it was under ground and thus escaped the vandalism of the destroyer.[5]

The letters of the epigraph mostly take the standard form, but as they manifest a hurried style, they appear very different from those of other Aśokan inscriptions. The hurried shape of

Da — — and unusual shape of *Ha* — — are pecu-

1. *E. I.*, Vol. VIII, p. 166.
2. *A. S. I.* (*A. R.*), 1904-5, p 69.
3. Ibid., p. 69.
4. *E. I.*, Vol. VIII, p. 166.
5. Ibid., p. 166.

liar to it. The letter *Ya* is represented only in its crescentic style; while the three dots for *I* seem to have been placed arbitrarily in their three positions— ⁝, ⁝, ⁝, ⁝ . The letter *Kha* is mostly seen with a circle at its bottom — . Sometimes the vertical portions of some of the letters are unusually long, e.g. *Ka* — , *Va*— . Cursiveness is also sometimes seen in *Pa* — , *Sa*— , *Ta* — etc.. Only one conjunct occurs in the text, and which is correctly written, *Sya*— .

AŚOKAN INSCRIPTIONS OF LUMBINI AND NIGLIVA

MINOR PILLAR EDICT OF LUMBINI :

The Minor Pillar Edict of Lumbini is of utmost importance in the history of Buddhism as it testifies to the birth place of Siddhārtha Gautama, the Buddha. This was found in the village of Rummindei (or Lumbinī), in the Nepalese Tarai to the north of the Basti district of Uttara Pradesh. The pillar stands *in situ* and the inscription on it tells us, "Here Sākyamuni, the Buddha was born", and so "the king Devānāṃpiya Piyadasi visited in person and offered worship at this place". It is a mutilated pillar of hard yellowish sandstone and rises to a height of 21 feet or so; around it is a sort of brick railing. Its upper portion is gone, and what remains of the top is split into two halves, the line of fissure coming down to near the middle height. 'The capital was of usual bell-shaped form, of which the base broken into two halves, exists in the compound of Rummindei temple near which the pillar stands. This fact proves that the pillar was complete when one day a lightning flash penetrated it from above, splitting it into two halves, so far as it was then exposed above the ground. The stone horse which crowned

the capital is gone with the upper portion of the shaft. The capital shows the usual festoon in the face of the big Cyma (*Padma*), under which in the centre is a hole, 5 inches in diameter and 1 foot in depth, in which was fitted the mortice that was fixed above the shaft.'[1]

The inscription is of great palæographic importance, being the best preserved of all the Aśokan inscriptions, and giving an exquisite example of the standard form of the script. The letters are very nicely and neatly cut, and the engraver has achieved the high-water-mark of excellence and perfection in craftsmanship. Not a single letter deviates from the standard style ; and accuracy and exactitude are surprisingly perfect. One notices the formation of *Ja*, which is expressed in its usual shape in line 1— ; but in order to show the medial sign *Ā*, a knob is inserted in between the middle line of the letter and the sign thus— . This is a reasonable development in order to distinguish the medial *Ā* sign, The letter *Ya* has always its standard shape— . The curves, angles, circles or semi-circles have attained a geometric perfection throughout the epigraph. The lines are straight and parallel and the distance from one line to another is equal at all the places. Another striking feature is the spacing noticed between the words. A punctuative value is evident here (e. g. the space after *Ca* and *Ti*); and we can well presume that the need of punctuation was, to some extent, realised and met.

The reasons for attaining this excellent palæographic perfection are not far to seek. The inscription itself is of utmost importance and states that 'when the king Devānāṃpiya Piyadasi had been anointed twelve years, *he came himself* and worshipped'. In all probability the epigraph was engraved under the direct supervision of the Emperor himself who came to the place in person. The inscription is short, consisting of only 90

1. Mukherjee, P. C. : *Antiquities in the Tarai Nepal*, p. 34.

letters spread over four and half lines, and thus could easily be engraved in a very short time by an expert. Evidently the engraver was a first rate craftsman, as a fine hand of him is manifested in the inscription. It seems that the engraver completed the work during the king's stay. The pillar was probably already brought and erected at the spot to commemorate the birth of the Buddha ; and later, during the royal visit, the record was incised upon it.

The only unusual feature that may sometimes be noticed, when the inscription is closely examined, is the slight elongation of verticals in some of the letters, which is perhaps due to the vertical position of the pillar at the time of engraving. Such a phenomenon is common in many pillar inscriptions, but in this epigraph it is not at all conspicuous. There are no mistakes in the text except an omission of an *anusvāra* which is left out in *Devāna* in line 1.

MINOR PILLAR EDICT OF NIGLIVA :

Another Aśokan pillar of polished sandstone was discovered in the Nepalese Tarai on the western bank of a large tank known as Nigāli Sāgara, about a mile south of the village Niglivā, which is situated about 3 miles north-west of Lumbini. The pillar is mutilated and only two portions of it are preserved. It is not *in situ*. The top of the pillar has a diameter of 2 feet, above which a smaller drum rises 2½ inches. In the centre of this is a hole, 4 inches in diameter and 1 foot 4 inches in depth, in which was fitted the copper mortice of the capital that is now missing. The upper portion is 14 feet 9½ inches in length and the lower one is about 10 feet.[1] The lower portion bears the inscription of Aśoka in four lines. Some letters in the first line and some in the beginning of the third and fourth lines are broken away.

The letters of the epigraph are identical in shape with those found in the MPE Lumbini ; and most probably the same artisan was employed here also. But accuracy and perfection are better achieved in MPE Lumbini than in this inscription. For example, in the letter *Ja* we find a superfluous knob in the

1. Mukherjee, P. C. : *Antiquities in the Tarai, Nepal*, p. 30.

middle— ← —, which is rightly engraved in the MPE Lumbini when to distinguish the medial sign for *Ī*. The letter *Ca* has become somewhat longer and breaks the uniformity of the line (see line 1,3). It seems that Aśoka first visited this stupa of the Konākamana Buddha, and had his record engraved before going to Lumbini. To pay his veneration first to Konākamana is ritually justified, as this Buddha was born before Gautama Buddha. The engraver, who probably accompanied him, gained experience at this place in accurate designing of the letters on a standing pillar, which he perfected marvellously when engraving on the Lumbini pillar.

Aśokan Inscriptions of Barabar Caves

Some fifty miles north of Gaya town in Bihar State, lie the hills of Barabar which are 'isolated rocks of syenitic granite rising abruptly from the plain. Although Barabar is the name by which the cluster is commonly known, each hill has a name of its own, the highest being called "Barabar", also "Siddheśwara" from a temple to Mahādeva that once crowned it".[1] There are altogether seven ancient caves in these hills; four of which belong to the Barabar group and three to the Nāgārjunī group. Each of the three Nāgārjunī caves contains an inscription of Daśaratha, the grandson of Aśoka; while among the four Barabar caves, three bear the inscriptions of Aśoka. According to the 2nd and 3rd inscriptions, the name of the hill was then *Khalatika*. The first and the second inscriptions of the Barabar caves and the three of the Nāgārjunī caves record the gift of caves to the Ājīvika sect.

The first cave inscription of Barabar consists of only two lines, while the second and third possess four and five lines respectively. The first two inscriptions are better preserved than the third, but an attempt has been made to chisel away the word '*Ājīvikehi*'. The first two were engraved when the 'King Piyadasi' had been anointed twelve years, and the third 'when he had been anointed ninteen years'. It is thus evident that the third

1. *JASB* (1847), Vol. XVI, Part I,p. 402.

inscription was engraved much later than the other two, and so might bear some different palæographic peculiarities. But since, as already mentioned, the third inscription is in a very blurred state and the shapes of the letters are very indistinct, no positive remark is possible with regard to any peculiarity. We shall therefore discuss all the three together.

The letters of these inscriptions are not very artistic, although they are very distinct, uniform and straight in the first two records. But at many places, hurriedness is also noticed; e. g. *Du* — , *Va* — , *Bha* — , *Ta* — .

In II-line 3, the engraver has mistakenly left the letter *Kha* without a knob or circle, though it is correct in the third inscription. Angularity is sometimes noticed in the letter *Da*— . An interesting feature is a slight broadening at the end of the stroke of some of the letters, e. g. *Sa* — . In this connection it is noteworthy that the flattening of the top of the letter became regular during the Śaka and Kuṣāṇa periods.

Nāgārjunī Cave Inscriptions of Daśaratha

In the Nāgārjunī hills, close to the Barabar hills, three caves were cut and donated to the Ājīvikas by Devānāṃpiya Daśaratha, the grandson of Aśoka. Except for the names of the caves mentioned therein, the three inscriptions are identical letter for letter, though differently arranged in three and half lines. The word '*Ājīvikehi*' is chiselled out in one of the inscriptions. Dr. D. C. Sircar thinks that this may have been done at the time of Maukharī Anantavarman who rededicated one Barabar cave to Kṛiṣṇa and two Nāgārjunī caves to Śiva and Pārvatī.[1] Since the inscriptions are identical in their texts

1. Sircar : *Select Inscriptions*, p. 80 (Foot-note, No. 2); also see Hultzsch : *C. I. I.*, Vol. I, Introduction, p. XXVIII.

(except in their first word), it is generally believed that they were all engraved in the same year soon after Daśaratha's accession.[1] It is possible, however, that the defacement occurred earlier when the script was still current.[2]

Although the character of these inscriptions does not appear to differ much from those of the Barabar Cave Inscriptions of Aśoka, they have been strikingly reduced to about half the size of those of Barabar. This phenomenon has affected the formation of the letters, and most of the verticals have become unusually short, e. g. *Na* — 𑀦 , *Va* — 𑀯 , *Ya* — 𑀬 etc. . A thickening tendency is also noticed in some of the letters, e. g. *Ṣa* — 𑀱 . A slanting form of *Ja* in its vertical line — 𑀚 — also appears, and it is noteworthy that this feature became common in later ages. The medial sign of *O* which is expressed as a straight horizontal line in *Go* — 𑀕𑁄 (II–1), also indicates the beginning of the evolution which took place in the later Brāhmī script. Cursiveness can be noticed in *La*, *Ha*, *Da* etc. . No dental *Sa* is to be seen, as it is always replaced with the retroflex *Ṣa*.

1. Cunningham : *Inscriptions of Asoka*, p. 31-32.
2. Basham, A.L. : *A History and Doctrine of Ājīvikas*, p.157ff.

CHAPTER VI

OTHER INSCRIPTIONS ATTRIBUTED TO THE MAURYAN PERIOD

So far we have studied the palæography of the Brāhmī inscriptions of Aśoka and his grandson Daśaratha. We shall now discuss a few other inscriptions which bear close affinity in the character of their script to those discussed above. Unfortunately none of these Brāhmī epigraphs bear any date nor do they present any name of an important king or any other specific guide by which we can determine their definite date. It is indeed rash to decide the date of an undated inscription on palæographic grounds alone. But in the absence of any other relevant sources, one has to deduce the conclusions from the evidence available. Indian palæography has a history of gradual evolution up to the present time. This phenomenon is sometimes very helpful in determining the time of an undated inscription of ancient India, and provides us with an approximate date, though sometimes one must allow a margin of a century or so either side. The inscriptions that we shall discuss in this chapter do not necessarily belong to the period of the Mauryas; but their style and type are very similar to and sometimes identical with those of the Aśokan Edicts; and hence they may be placed round about the period of Aśoka.

Piprāhwā Vase Inscription

In a village called Piprāhwā or Piprāvā in the Basti district of U. P., a stupa was opened in 1897 from which were exhumed four sandstone caskets and a crystal bowl.[1] One of the caskets was found to be inscribed with letters, which are so slightly scratched that it was impossible to obtain any impression of them. These sandstone caskets contained pieces of bone in a good state of preservation.[2] The urns also contai-

1. *JRAS*, 1898, p. 573; Mukherjee, P. C.: *Antiquities in the Tarai Nepal*, p. 43.

2. *JRAS*. 1898, p. 577.

ned ornaments, gold leaves, beads, etc.. A group of stupas lies about half a mile south-west of Piprāhwā and there is another mound of ruins more than a quarter mile to the east.[1] Unfortunately they have not yet been explored. The Aśokan pillar of Lumbini stands at about eight miles east-north-east from here, and that of Nigliva was found about fifteen miles to the north.[2]

The Piprāhwā Vase Inscription is a short epigraph which consists of only 37 letters with no conjucts or long medial signs. The inscription refers to the relic casket of the Buddha. Since there exist some linguistic peculiarities pointing to a very remote time, especially the conspicuous absence of long medial vowels, some scholars have been led to believe its age anterior to Aśoka.[3] But the arguments are by no means conclusive, and some scholars place it in the 3rd Century B. C..[4]

The following letters are found: *Ka*— [illegible], *Ga*— [illegible], *Ta* — [illegible], *Da*— [illegible], *Dha*— [illegible], *Na*— [illegible], *Pa*— [illegible], *Ba*— [illegible], *Bha*— [illegible], *Ya*— [illegible], *La*— [illegible], *Va*— [illegible], *Sa*— [illegible], *I*— [illegible]. An *anusvāra* is noticed with *Yaṃ*— [illegible]. As the inscription is a scratching and not properly engraved, it is but to be expected that there should be variance

1. *JRAS*, 1898 p. 581.
2. *Ibid*, 1906, p. 177.
3. Buehler: *JRAS*, 1898, p. 388; Fleet: *JRAS*, 1906, pp. 177; Ojha: *Prācīnalipimālā*, p. 3; Barth: *I. A.*, Vol. XXXVI (1907), p. 124; Smith: *JRAS*, 1898, p. 587; Mukherjee, P. C.: *Antiquities in the Tarai Nepal*, p. 44; Bhandarkar, D R.: *Asutosh Mookerjee Silver Jubilee Volumes*, III, p. 510.
4. Sircar; *Select Inscriptions*, p. 84.

in the size of the letters and inaccuracy in their design. But the general appearance of the letters is so very similar to those of the edicts of Aśoka that there is not a single letter which does not agree with a form found in them. Some of the letters are of the standard Aśokan forms, e.g., *I*— ⁚, *Bha*— , *Ya*— etc.. The medial signs are very correctly attached. Cursiveness is obviously noticed at one place in *Pi*— ; while the medial sign for *U* has tended to become somewhat long, obviously due to the shape of the casket. The medial sign *E* occurs twice, and is represented correctly.

In view of the facts that the text refers to the relic casket of the Buddha and that its stupa was of a considerable size,[1] and also that it is situated in the vicinity of Lumbini and Nigliva, may we assume that Aśoka paid a visit to this stupa as well; and venerated it when on his pilgrimage to the Buddhist sacred places? It is told in the MPE Nigliva that the Stupa of Konākamana was enlarged twice to its original size. No doubt Aśoka felt that the stupa of Konākamana, a previous Buddha, was not large enough, but rather disgracefully small, and perhaps what prompted him to double the size, besides his own religious beliefs, was the fact that the stupa of the Śākyamuni Buddha at Piprāhwā was considerably large. If this assumption of ours is true, we can deduce that the inscription on the Piprāhwā vase is anterior to Aśoka's Nigliva inscription. In any case, palæographically it cannot be placed later than the age of the Mauryas. It is decidedly earlier than the Besnagar Pillar Ins. Bhāgabhadra,[2] which belongs to the end of 2nd. Century B. C..

Copper-Plate Inscription of Sohgaura

A copperplate inscription was found in digging a foundation of a house in a village Sohgaura, about 14 miles south-south-east from Gorakhpur in U. P.. Later it was secured by

1. Mookerjee, P. C.: *Antiquities in the Tarai Nepal*, p. 43.
2. Sircar: *Select Inscriptions*, p. 90.

the local collector who presented it to the Royal Asiatic Society of Bengal in 1893.[1] The copper-plate is a small rectangular object measuring $2\frac{1}{8}$ inches by $1\frac{1}{8}$ inches. Circular holes are pierced near each corner, which were intended to attach the plate by-rivets or nails. It is cast in a mould and bears a number of superfluous dots that may be mistaken for *anusvāra*. The back of the plate is rough.

The record consists of 72 letters spread over four lines. All the letters very much resemble those of the Aśokan edicts, although some do not belong to the standard type. The letters *Ga*– , *Ta*– , *Na*– —are carved in straight forms, while the letter *Va* is very well drawn with a good circle at its bottom— . But the letter *Ya* appears only in its crescentic shape— —, and that also sometimes is very large. The letter *Ha* has also taken a hurried shape thus— . Once the letter *E* occurs in its correct form— —; so also the letter *Bha* is written correctly— . The letter *Ma* has a conspicuous unusual shape, in which the upper and lower parts are invariably placed apart, thus— . This feature of *Ma* is not at all common in the Aśokan inscriptions; but appears as a freak at three places (MRE Brahmagiri–3; SRED–I–16; MRE Gujjara–3).[2] The reasons for its appearance in this copper-plate

1. *JASB* (Proceedings), 1894, p. 84; Ibid. 1907, p. 509 ff.; *ABORI*, Vol. XI, p. 32; *E. I.*, Vol. XXII, p. 1; *I. A.* (1896), Vol. XXV, p. 261; *I.H.Q.*, Vol. X, p. 54; Sircar: *Select Inscriptions*, p. 85.

2. Jayaswal (in *E. I.* Vol. XXII, p. 1) and Barua (in *ABORI*, Vol. XI, p. 34) could not trace out this shape of *Ma* in the Aśokan inscriptions.

record is not difficult to explain. Being a cast record, the artisan, probably to suit his convenience, drew both the parts separately when writing in the mould. One can notice the same feature in the letter *Ya* in line 1, in which the vertical line is slightly away from the lower crescent— ; and so also in letter *Bha*-in line 3, the lower right vertical is left unattached to the upper horizontal line— . It is erroneous to ignore this technical phenomenon and rash to judge the letter as the representation of the parent type and thereby to presume it to be pre-Mauryan.[1] A similar feature can be noticed in the Patna Seals, where *Ma* is represented with both its parts separate.[2] Inadvertence by the artisan is also evident in the shapes of *Ḍa* — , and *U*— (or *Va*). These are the cursive forms of the letters; but Dr. Buehler compared this cursive form of *Ḍa* with one found in the MPE Queen's in line 3,[3] though they are not exactly similar. A serious mistake is to be noticed in the medial sign of *I* in *Hiṁ* in line 3, in which it is attached in a reversed manner — . Obviously this vowel sign was written inadvertently following the usual manner although writing in the mould, where, in fact, reversed letters are required for a correct face.[4] Such reversed form of medial *I* is not found anywhere else. Other medial signs for *A* and *E* are correctly attached, but the medial sign for *O* is expressed by putting the upper tick to the right and the lower to the left in *Ko*— and *No*—

1. Barua in *ABORI*, Vol. XI, p 34.
2. *JBORS*, Vol. X, p. 189.
3. *I. A.*, Vol. XXV (1896), p. 262.
4. Cf., Eräṇ Coin Inscription : *Catalogue of the coins of Ancient India* by Allan, Plate XVIII, No. 6.

I . This is not the correct form of Aśokan Brāhmī. Cursiveness is noticed here and there in the shapes of the letters as well as in their medial signs. A tiny letter *Ka* is also noticed in the end of line 1, which is obviously a later correction. In line 3, letter 9 there appears to be *Ca* or *Cu*; but Dr. Barua endeavoured to read it as *Cha*, though in a very fantastic manner. He also emphatically maintained that this was the parent form of *Cha* in the Devanāgarī and Bengali scripts.[1] Here it may be pointed out that the shape of *Cha* has undergone to very minor changes during the subsequent ages, and the Aśokan form of *Cha* — ф — is apparently the parent one. Dr. Barua's arguments are very far-fetched and so in no way decisive.

The copper-plate also bears seven symbols which are arranged at the top of the text. These symbols have variously been explained. However, we are mainly concerned with one symbol which is represented as *Ma* (or *Mo*) — ℧ . We have noticed this symbol in the Aśokan edicts (in SREJ–I, II), and there it is probably meant to represent the first syllable of the word *Maṅgala*. Probably in this record too it denotes the same. Dr. K. P. Jayaswal read this symbol as *Mo* and thought it to be the first syllable of the word *Moriya*. He also tried to explain the other symbol — [symbol] —as an abbreviation of *Candagutta* (Candragupta), by taking the top crescent as *Candra*, and the remaining hill-like combination for *Gutta*—the upper loop— ∩ —for *Ga* and the two lower loops— m —for *tta*; and thus altogether *Candagutta Moriya* or Candragupta Maurya.[2]

Most of the scholars have dated this record to the pre-Aśokan period. As mentioned above, Dr. K.P. Jayaswal believed

1. *ABORI*, Vol. XI, p. 34.
2. *E.I.*, Vol., XXII, p. 3.

it to be of the Candragupta Maurya's time[1], while V. A. Smith thought it to be of the Mauryan period without specifying the reign[2]. Fleet agreed with this view and placed it between 320-180 B.C.;[3] and Buehler stated that 'the letters of the inscription certainly point to the time of the Mauryas'[4]. Prof. Barua pronounced it to be a pre-Mauryan record,[5] but Dr. D. C. Sircar is not ready to place it before the 3rd Century B.C.[6]. We have already pointed out that the letters bear a very close similarity to those of the Aśokan inscriptions and we believe that it may belong to approximately the same period. The arguments used by Jayaswal and Barua for its earlier date are not very convincing. The emblem of crescent on the hill cannot be proved to be a sign of Candragupta Maurya, and Jayaswal's theory is little more than a guess. The unusual form of *Ma* — [Brāhmī sign] —, as we have seen, is not sufficient enough to prove a pre-Mauryan date. The tradition of a great famine at the end of Candragupta Maurya's reign gives no countenance to believe that this plate was specifically connected with it; it refers apparently to the relief in case of a famine, and there is no reason to think that famine conditions prevailed when the plate was issued.

STONE-PLAQUE INSCRIPTION OF MAHĀSTHĀN

A small stone-plaque bearing an inscription in Brāhmī was discovered in the village of Mahāsthān of Bogra district, East Pakistan. It was picked up near a tank not far removed from a high mound, probably an ancient stupa.[7] The inscription is incised on a piece of a hard sandstone which measures 3½

1. *E.I.*, Vol. XXII, p. 3.
2. *JASB*, 1894, (Proceedings), p. 86.
3. *JRAS*, 1907, p. 509.
4. *I. A.*, Vol. XXV (1896), p. 266.
5. *ABORI*, Vol. XI, p. 32; *I. H. Q.*, Vol. X, p. 54.
6. Sircar : *Select Inscriptions*, p. 58 (Foot-note, No. 1.)
7. *E. I.*, Vol. XXI, p. 83.

inches by 2½ inches and contains seven lines, of which the last is almost completely effaced, leaving no trace of any full letter. The upper part of the stone is missing, and it is difficult to say definitely how the inscription started.

Most of the letters of the inscription are straight in their formation, e.g., *Ta* — ⅄ , *Ga* — ∧ , *Na*— ⊥ , *Pa*— ㄴ , *La*— ⅃ etc.. It has been pointed out by some scholars that the vertical portions of some of the letters are slightly prolonged.[1] But viewing the record as a whole, elongation is not conspicuous. Almost all the letters belong to the standard form of Aśokan inscriptions. The letter *Ya* is invariably represented in its correct form— ⩛ , so also the letter *Va* has got a good circle at its bottom— ♁ —, and *Ka* is expressed as a perfect cross — + . The only form which does not agree with the most usual type of the Aśokan inscriptions is that of *E* which is always represented thus— △ . This form is attested in the Aśokan inscriptions, but is less common than the standard form — ▷ . The letter *Ha* adopts a hurried form — ㄴ . The engraver has made some mistakes in forming the shape of *Sa*. He starts correctly in line 2, but at other places the loop has too long a curve with the result that the letter appears like a retroflex *Ṣa*. But one should notice how very correctly the vowel mark of *U* has been attached to the

1. *E.I.*, Vol. XXI, p. 84.

first curve of the letter in line 5 thus — [glyph] (*Su*). This shows that the letter is intended to represent *Su* ; not *Ṣu*, for in the latter case, the *akṣara* would have been written as— [glyph] . The medial sign for *O* is correctly placed in *Ko* — [glyph] —; and the other medial signs are also expressed rightly. The most striking feature of this record is the appearance of the *Daṇḍa* sign — । — as a punctuation in the text. Dr. Bhandarkar rightly observes that 'the constant use of the perpendicular stroke was a *virāma* or stop to mark the words and clauses of the record.'[1] We have already seen a similar vertical stroke in the Aśokan inscriptions (in REK, MRE Sahasram and MRE Maski); and it is also to be noticed in the Ramgarh Cave Inscriptions which we shall discuss in the following pages.

The letters of this plaque are so strikingly similar to those of the Aśokan edicts that one cannot but date this record sometime near about the same period. Dr. Barua traced it back to the pre-Aśokan time on the basis of its language and contents.[2] As this plaque refers to the storage of supplies for the famine relief, he associates it with the Sohgaura Copper Plate Inscription, which was made for the similar purpose, and believes that both are contemporary. We have already shown that in the case of the latter, the evidence is not sufficient to place it definitely to the pre-Aśokan time ; and the same considerations apply in this case also. Dr. Bhandarkar believes that 'as the alphabet and the language of this record are exactly like those of Aśoka's edicts, it is not impossible that he [the issuer of the record] was a prince of Mauryan dynasty.'[3] Dr. D. C. Sircar, on the other-hand, is inclined not to place it before 3rd Century B. C.[4].

1. *E. I.*, Vol. XXI, p. 84.
2. *I. H. Q.*, Vol. X, p. 57.
3. *E. I.*, Vol. XXI, p. 89.
4. Sircar : *Select Inscriptions*, p. 82.

CAVE INSCRIPTIONS OF RAMGARH HILLS[1]

Two large caves with Brāhmī inscriptions in each were discovered in the Ramgarh hills, in Madhya Pradesh. The northern cave is called Sītābeṅgā and the southern Jogīmārā[2]. The inscription in the Sītābeṅgā cave consists of only two lines, while that of Jogīmārā is spread over five lines. In the latter, the engraver started writing with small letters but after a few words engraved in two lines, perhaps finding the letters too small or the smooth surface insufficient, he gave it up and restarted the whole text once again in bold letters which he completed in three lines. The letters of these three lines are very thick and sometimes unusually large (e. g. *Da* in line 3). The engravings of Sītābeṅgā are symmetrical and uniform but they look thin and scratchy. As both the cave-inscriptions are similar in many respects and also probably contemporary, we shall discuss them together.

Although the inscriptions are apparently not quite as ancient as those of Aśoka, they bear a close similarity to the Aśokan inscriptions. The letters of these records are written mostly in the standard Aśokan style and they are usually straight in shape. The letter *E* is invariably represented in its correct shape thus — ▷ —; and the letter *Ha* also has the correct form — ⅃ . The letters *Ma* — 8 , *Da*— ⊃ , *Va*— ⅄ etc. are also found in their correct shapes. The medial signs for *A*, *I* and *E* are also rightly attached. A conspicuous similarity to Rock Edict Kalsi is also noticed in the

1. See: *A. S. I* (*A. R*)—1903-04, p. 123, Cunningham: *Inscriptions of Asoka*, p. 33; *JASB*, Vol. LXXI (1902), p. 9; *I. A.*, 1873, p. 243.

2. *A. S. I.* (*A. R.*)—1903-04, p. 123.

arrow type formation of *Ya*— and the *Daṇḍa* sign —

This punctuation sign occurs as many as eight times in these records, apparently to mark more or less connected groups of words of a sentence, whereas in REK, its use seems quite arbitrary. But here too, the records being too small, we cannot trace any definite system employed in the use of these *virāmas*. In fact the arrow-shaped *Ya*— — represents a scratchy shape of the letter—

. Two conjuncts are also noticed. They are *Kyi* and *Spha*. While the former is written correctly — — , the latter is wrongly engraved. It was perhaps due to the scribal carelessness that the letter *Pha* is attached to the second loop of *Sa* thus — — which ought to have been attached to the right loop thus — .

Besides their similarity to the Aśokan inscriptions, we also notice some later elements in the formation of the letters. The most striking feature in the Sītābeṅgā inscription is the shape of *Sa* in which the left loop tends to adopt a hanging curve as we find in later ages. So also is the formation of *Kha*— —, which points to a tendency of later times. In some of the *akṣaras* a tendency to equalisation of the verticals, which particularly developed after the Mauryan period, can also be noticed, e.g., *Ta*— , *Pa*— (Jogīmārā line 5), *Na*— .

The letter Ra is represented in a corkscrew shape— —,

which may be compared with a similar form found in the Besnagar Pillar Inscription of Bhāgabhadra.[1] Another feature, in which they differ from the Aśokan inscriptions, is the peculiar position of attaching the medial signs for *U* and *Ū*, which are not placed at the bottom, but just above the bottom—*Ku*— [sign], *Ru*— [sign], *Bhū*— [sign]. Though absent in the Aśokan records, stray occurrences of this practice are to be noticed in some of the later inscriptions.[2] It seems very probable that these records of the Sītābeṅgā caves were engraved soon after the Aśokan period and so the older forms also survived along with the new ones.

STONE INSCRIPTION OF BARLI

An inscribed fragment of a pillar was discovered in the village of Barli in Rajasthan by the Late Pt. G. H. Ojha in 1912.[3] The inscription is incised in bold letters which are spread over four lines.

Pt. Ojha was inclined to ascribe it to 443 B. C, a date which he derived from the word *'caturāsiti'* that occurs in the text, which he connected with the Nirvāṇa of Lord Mahāvīra. He supported his view by reading the first *akṣara*— [sign] —as *vī*, and suggested that the medial sign attached to this letter is a style of long medial *Ī* which was prevalent in the pre-Aśokan era.[4] Dr. K. P. Jayaswal for the first time edited this inscription, and he denied this mark as a sign for long medial *Ī*; but he maintained that the letters of this inscription belong to the pre-Mauryan period and dated it to 374-373 B. C.[5].

1. Sircar : *Select Inscriptions*, p. 90.
2. See : Cunningham : *Mahabodhi*, Plate-X, Nos. 4, 5, 6, 7, 9, 10 ; *E. I.*, Vol. XV, p. 269, No. 34.
3. Ojha : *Prācīnalipimālā* (Hindi), p. 2.
4. Ibid. p. 2-3.
5. *JBORS*, 1930, p. 67-68.

On the other hand, Dr. D. C. Sircar has established an altogether different view by interpreting the text in a different manner. He believes that the first *akṣara*— —is *Dva* or *Dvaṃ* (not *vi* or *vī*) which he restores as *Siddhaṃ*. He places the record in the 1st Century B. C.[1].

There are many difficulties in accepting the former view, dating the epigrah to a pre-Aśokan period. In the first place, the first *akṣara* cannot be *Vī* as Ojha suggests. It is obviously a *Vi* with the medial sign of *I* which is wrongly attached. It seems to be a scribal mistake, since we do not find any other example of this form of medial *Ī* — — either in pre-Aśokon times or after that period which can warrant his presumption. By attaching the medial sign, the shape of *Va* is shortened, for this reason Sircar refuses to read the letter as *Vi* or *Vī*. But the shortening of the length of a letter owing to the presence of a vowel-mark can also be noticed in other letters of the same inscription. For Example, in line 3, letter 5, the *li* is unusually shortened. The shortening of verticals is a phenomenon which normally indicates a later date of the inscription. A later tendency is also noticed in the formation of *Bha*. Dr. Sircar may be correct in dating the record some time in the 1st Century B.C.,[2] but his reading of the first *akṣara* as *Dva* or *Dvaṃ* does not impress us. In the formation of the conjunct *D* + *V* = *Dva*, as read by Sircar, we find that the letter *Da* shows a later style of reversed shape — —which does not occur before the Kuṣāṇa period,[3] and thus if this letter is accepted as *Dva* or *Dvaṃ*, the record should be placed still later than the First Century B.C. . Moreover the other letter is definitely *Va* and it is impossible to accept it as implying *Ddhaṃ*,

1. *JBRS*—1951, p. 34.
2. Ibid. p. 36.
3. See : *E. I.*, Vol. I, p. 381, No. 1 (Plate facing p. 388).

as Dr. Sircar restores it. Whatever may be the correct reading of the text, the inscription, however, on the basis of its palæography, cannot be placed earlier than the 1st or 2nd Century B. C. .

CASKET-INSCRIPTIONS OF BHAṬṬIPROḶU

Three inscribed relic caskets—two of stone and a small one of crystal—and a small inscribed hexagonal piece of crystal were exhumed from a stupa at Bhaṭṭiproḷu in the Krishna district of Andhra Pradesh. The inscriptions are altogether ten, of which nine are inscribed on the relic caskets while the tenth is scratched on the piece of the crystal and is difficult to read on account of the shallowness of the strokes.[1]

On these three relic caskets, some letters are found to possess abnormal shapes. The abnormal letters are *Gha*— , *Ja*— , *Ma*— , *La*— and *Ṣa*— . A new form of *Ḷa*— (not found in the Aśokan inscriptions) to represent the south Indian sound is also seen. Another important feature is the notation of medial *A* by attaching a dash— , which necessitated a different medial sign for *Ā*, which is marked by two small strokes at a right angle– . But when the consonant is followed by an *anusvāra*, the dash for *A* is not inserted, presumably because it was thought unnecessary. The letters *Da* and *Dha* are reversed— , —and the letter *Bha* has its lower portion to the right rather than to the left— .

1. *E. I.*, Vol. II, p. 323 ff. ; *Viena Oriental Journal*, Vol. VI, p. 148 ff. ; Rea, A. : *South Indian Buddhist Antiquities*, p. 9. *JRAS* ; 1908, p. 99 ff.

A small tail is also noticed in the letter *Ca*— . It should be observed that these peculiarities do not appear in the tenth inscription found on the piece of the crystal, except the reversed form of *Da*— and the tailed *Ca*— , otherwise the forms of the letters are normal.

Let us examine these formations in somewhat greater detail. The letter *Gha*— —is of an unique shape and no example of it can be found anywhere else. This form has left no influence upon the later development of the letters, nor can it be traced from any other previous source. The letter *Ja* has lost its middle horizontal line in some places— —, although correct examples also exist on the caskets as well as on the crystal. This form is obviously a mistake and cannot be regarded as a regular variety of the letter. Why the engraver inverted the letter *Ma*— —is difficult to account for; but probably he was only semi-literate and imagined that this form was the correct one. The correct form of *Ma* is used on the piece of crystal, the inscription of which seems to be the work of another hand. Ignorance on the part of the engraver may also account for the reversed form of *Śa*— (original form—), *Da*— , *Dha*— and *Bha*— . His peculiar hand has formed an irregular shape of *La*— . The tail in the letter *Ca* is obviously due to carelessness.

It should be remembered that the correct shapes of the letters appear on the crystal inscription. The peculiar shapes of some of the letters are not at all traceable on any other

inscription elsewhere. No further evolution of them is found in the South Indian script of later ages.[1] With regard to the notation of the medial *A*, it is interesting to observe that even today in South India the short *A* followed by a consonant is more emphatically pronounced than in North India. In order to denote the sound for *A*, this notation was probably adopted locally; and eventually another sign for *Ā*— ˥ — was employed. A consonant with *anusvāra* implies the sound for *A* and thus the *A* sign was omitted from there. The engraver was a South Indian and so he employed the special letter for South Indian *Ḷa*. But the innovations used in these caskets were evidently soon forgotten and left no trace on later scripts.

On the basis of these peculiarities, it has been maintained by some that the inscriptions belong to a period somewhat close to Aśoka. Buehler believes that they are 'probably only a few decades later than Aśoka's edicts.'[2] Pandey on the other hand thinks that 'they can be assigned to a date earlier than that of Aśokan inscriptions'.[3] But unfortunately these scholars, obsessed with these peculiar features, which are mostly mistakes or due to individual style, have overlooked those factors which bring down these inscriptions to a much later date. We know that the reversed shapes of *Da*— ᑕ and *Dha* ᗡ — became prevalent in later times. The shapes of *Ga*, *Va* and *Ya* also indicate later tendencies. The notation for medial *O* as a straight horizontal line, which occurs invariably, also points to a later development of Brāhmī writing. All these palæographic tendencies of later times are obvious enough to place the inscriptions sometime in the 1st Century B. C. or 1st Century

1. For the development of the south Indian scripts see: Sivaramamurti C.: *Indian Epigraphy and South Indian Scripts* (*Bulletin of Madras Govt. Museums*, Vol. III. No. 4) pp. 56–154.

2. *E.I.*, Vol. II, p. 325.

3. Pandey: *Indian Palæography*, Part I, p. 18,

A. D.; although a few earlier features do exist side by side. The script can neither be prior to Aśoka, nor can it be a widely used regional variety. It is beyond doubt that a century or two elapsed after the Mauryas, and the writing took this shape because of the individual engraver, who was not very conversant with the script of his time.

IMAGE INSCRIPTIONS OF PARKHAM AND PATNA

A statue made of grey sandstone bearing a high polish and a small inscription in two lines was discovered in the village of Parkham near Mathura in U.P. by General Cunningham in 1882-83. He called it a figure of a *Yakṣa* and ascribed it to the 3rd century B.C.[1] Two other similar statues were found in Patna, each bearing a small inscription and polish.[2] In his report Cunningham stated, "At first I thought that the statues (of Patna) might be of the age of Aśoka, but the forms of the letters show that they must be of later date, somewhat about the beginning of the Christian era".[3]

It was the Late Dr. K. P. Jayaswal who tried to identify these statues as the images of those kings referred to in the literature as ruling prior to Aśoka. With regard to the Parkham image, he called it a statue of Kūṇika Ajātaśatru, primarily based on his own decipherment of the inscription, and accordingly dated it C. 515 B.C.[4] He also endeavoured to strengthen his assumption by pointing to some palæographic peculiarities,[5] though fantastically. The Patna images, he declared to be the statue of Śaiśunāga kings and thus believed them to be of the Pre-Mauryan period.[6] These views of Jayaswal aroused a great controversy among the scholars of his time, which eventually led to the final settlement

1 *A.S.I.R.* (Cunningham), Vol. XX, p. 41.
2. Ibid., Vol. XV, p. 2.
3. Ibid., p. 2.
4. *JBORS*, Vol. V (1919), p. 551.
5. Ibid., Vol. VI—(1920), p. 173.
6. Ibid., Vol. V—(1919), pp. 88.

of the problem by showing that the inscriptions of these images cannot be of so early date, but should rather belong to later centuries.[1] In fact, when we examine the letters of the Parkham image, a later tendency is clearly noticed, and we fully agree with Dr. Sircar in dating it to the 2nd Century B. C.[2]. For example, we notice the shapes of *Bha* — [glyph], *Ga*— [glyph] etc., which are the forms of later ages. The *akṣara Pu* — [glyph] — clearly indicates a later shape, as its upper verticals are tending to become almost equal. Again, we notice the shape of *Si*, which bears no archaic feature at all.

The Patna image inscriptions are still later. Each decipherable letter can be traced from any North Indian inscriptions of the beginning of the Christian era. Notice the shapes of *Ya*— [glyph], *Kha*— [glyph], *Cha*— [glyph] etc., which can be seen in the Kuṣāṇa inscriptions or even in later times.[3] Here again, we have to endorse Dr. Sircar[4], and thus in no way can we attribute these inscriptions to the Aśokan period, far less to earlier times.

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1. For discussions see *JBORS*, Vols. V, VI; *I. A.*, Vol. XXXXVIII—(1919), pp. 25-36.
2. Sircar : *Select inscriptions*, p. 94.
3. See : *E. I.*, Vol. II, Plates facing pages, 202, 208, 209.
4. About 1st Century A. D., Sircar : *Select Inscriptions*, p. 95.

CHAPTER VII

CONCLUSION

The Aśokan Brāhmī inscriptions, as we have seen, are the earliest epigraphic records in India other than a few which are doubtfully believed to be anterior to Aśoka. Before dealing with the Aśokan Brāhmī in its fullest detail, it was but expedient to discuss its origin, though very briefly. While tackling this problem, we were confronted with numerous theories that have been propounded by many scholars. But one fact is generally accepted, that the Brāhmī script was perfected by the Sanskrit grammarians to suit the Sanskrit phonology. This general view gave us a lead to make further investigations of the problem. Proceeding further we have found that the Brāhmī script was considerably influenced by the rules of Sanskrit phonology. Consequently, we have been able to show the basic or primary forms of the letters and their developed or secondary forms. The probable evolution of the secondary forms from the basic letters has been indicated as far as traceable. While showing this fundamental difference, we have also pointed out those letters which do not allow any link either to the preceding or to the succeeding letters of the *Varga*. It is noteworthy that the first and the third letters of each consonant *Varga* are basic forms, which often give rise to the other letters. Three main vowel letters produce the other vowel signs; while on the other hand, four semi-vowels remain independent and unproductive.

An endeavour has also been made to determine the date of Brāhmī. Since ancient Sanskrit grammarians were responsible for perfecting the script, it was presumed that this process began from the time of the earliest grammarians. These grammarians can be traced back as early as the 10th Century B.C.; and hence it is most probable that old Brāhmī started to add its new letters by this time, and attained perfection by the time of

Aśoka, when it appears in almost a complete and finished form. A few letters of the Sanskrit alphabet are not to be found in the Aśokan Brāhmī owing to the simple fact that the language used is Prākṛit and not Sanskrit.

We have made an exhaustive treatment of Aśokan Brāhmī. This has yielded a very significant conclusion. We have found that there existed imperial standard forms of the letters and that no regional influence can be noticed. All those peculiarities or variations that happen to occur are either due to the style of the engraver or scribe or are inadvertently engraved. The standard shape is most frequently employed and often the most artistic in design.

Those inscriptions which have been said to be contemporary or anterior to Aśoka demanded a thorough examination. Since none of these inscriptions provides any date, or the name of any known king or gives any other relevant clue to determine their dates, it has been a most difficult task to fix their time decisively. Palæography alone is too fragile a basis to determine the date of an inscription unless it is supported by other facts, however remote they may be. In view of this fact, we have not been in a position to say anything definitely about their dates. However, we have expressed our opinion in a very reserved manner, allowing full consideration to the data available. These inscriptions may belong to the Aśokan period or may be anterior to him, but nothing can decisively be said.

RED—I—4, III—3, IV—3, V—3, 5, VI—1, 3, 4, XIV—2.
SRED—I—4, 15, 16, 20, 23, II—3, 4, 6, 7, 8, 9, 10.
REJ—II—1, 3, IV—2, 4, V—3, VI—2.
SREJ—I—4, 6, 10, 11, II—2, 5, 8, 11, 14.
REK—II—5, IV—9, 10, VI—21, X—28, XI—30, XII—32, 33, 34, XIII—35, 36, 39, South-face—12, 22.
MRE Sahasram—4, 6, 7.
MRE Maski—1.
MRE Brahmagiri—2, 7, 11.
MRE Siddapur—4.
PEDT—I-1, 3, 4, 5, II-11, 15, III-17, IV-3, 4, 10, 12, 13, 15, V-1, 2, 4, 5, 10, 13, 17, 19, VI-3, 4, 5, 9, VII-11, 13, 16, 18, 19, 21, 22, 23, 25.
PEDM—II-2, 5, 6, III-4, IV-6, 7, V-6, 9, 11, 14.
PELA— 1-2, 3, 4, II-3, IV-2, 3, 5, 6, V-1, 2, 3, 4, 5, 6, 7, 8, 10, 11, VI-3, 6.
PELN—I-2, 3, 4, 5, II-1, 3, 4, IV-2, 3, 6, 7, 8, V-2, 5, 7, 13, VI-3, 5.
PER— I-2, 3, III-2, IV-2, 3, 5, 6, V-2, 4, 7, 8, 9, 10, VI-1, 2.
PE All. Kos. -II-1, V-1.
MPE Kosambi—4.
MPE Sarnath—7.
MPE Rummindei—2.
Slab Ins. Bhabru—1, 4, 5, 6, 7, 8.
MRE Rajula Mandagiri—1.
RE Erragudi—IX-3, 4, 10, X-2, 3, 4, XI-3, XII-4, XIII-3, 16, 18, XIV-2.
MRE Gujjara-1, 4, 5.
RE Bombay Sopara—IX-9.

(5) H MRE Brahmagiri—1 (in *Ayaputasā*).
MRE Siddapur—1, 12.
MRE Rajula Mandagiri—3.

APPENDIX No. 1.

A

(Angular)

(1) REG—I—8, III—5, IV—2, 5, 10, V—2, 3, 9, VI—1, 4, 7, 12, VIII—1, 2, IX—17, X—3, XII—3, 5, 7, 9, XIII—3, 5, 6, 9, XIV—1, 4, 5.
RED—V—2, VI—1, 6, VII—2, VIII—1, IX—3, 4.
REJ—I—3, III—3, VI—7, IX—3.
SRED—II—2, 3, 8, 11.
REK—XI—30, XIII—35.
MRE Rupnath—4.
MRE Brahmagiri—2, 7.
MRE Siddapur—18.
PE All. Kos.—II—2, 3, 4, V—1, 2, VI—2, 3.

(2) REG—IV—11, X—3.
RED—III—2, 3.
REJ—VI—1, 6, XIV—1.
SREJ—II—15.
REK—I—3, 4, IV—12, XIII—37, 39, South-face—15.
MRE Brahmagiri—3.
MRE Siddapur—14.
PE All. Kos.—II—2, 3.

(3) REG—VI—10, 11, X—1, 4, XII—8.
MRE Rupnath—3.
PE All. Kos.—VI—2.

(Cursive)

(4) REG—I—10, III—2, 5, IV—1, 2, 3, 4, 5, 6, 7, 9, 10, 11, V—8, 9, VI—13, 14, IX—3, 4, 6, XII—2, XIV—1, 2, 3.

(6) H SRED—I-7.
REK—I-3, II-4, III-7, IV-10, 12, 13, V-14, VI-17, 18, 19, IX-24, 26, 27, X-27, XII-31, 35, 36, XIII-South-face-6, 15, XIV-19, 20.
MRE Sahasram-5.
MRE Maskı—6.
PEDT—V-15, VI-8, VII-16.
PELA—I-3, 5, II-1, III-2, IV-6, V-8.
PELN—III-3, IV-6, V-2, 9, 12, VI-2.
PER— 1-2, 4, II-2, 3, IV-2, V-1, 5, 6, VI-4.
MPE Lumbini—5.
MPE Nıglıva-3.
Slab Ins. Bhabru-1, 5.

(7) H REK—III-8, IV-9, 13, V-14, VI-19, 21, IX-25, X-28, XII-31, 33, XIII-36, 38, 39, XIII-South-face-6, 15, XIV-6, 8, 10, 21, 22.

(8) K REG—I-6, 9, 10, III-3, IV-11, 20, XII-3.
RED—1-4, III-2, IV-1, 2, 7, 8, V-2, 5, IX-4, 5, XIV-1, 3.
SRED—I-9, 11, 12, 14, 15, 21, 22, 23, 24, 25, 26, II-6, 7, 8.
REJ—VI-3, 4, IX-2.
SREJ—I-6, 8, 11, 12, II-10.
MRE Maski—5.
MRE Sıddapur-4.
REK—XII-32 (ın Atapāṣada), XIII-South-face-12, 22.
PEDT—I-2, 8, II-13, 15, III-20, IV-2, 4, 6, 11, 14, V-2, 18, VI-2, 3, 6, VII-23, 25, 30, 31, 32.
PEDM—IV-3, V-3, 6, 13.
PER—II-3.
PE All. Kos.—I-2.
MPE Sanchi—6.
MPE Sarnath—8.

(9) H MRE Erragudi—8, 9, 11, 22.

(10) PE All. Kos.—I-2, VI-2.

(MIXED FORMS)

(11) REG—III-5, IV-2, 4, V-4, 9, IX-2, 5, XI-3, XIII-2, 7, XIV-2.
RED—IV-1, 4, 7, VI-2, VIII-3.
REJ— I-2, 4, IV-1, VI-1.
SREJ—II-2.
PER—II-1.
PE All. Kos.—I-2, II-1, V-1, 2.
MRE Rupnath—4.
RE Erragudi—V-7.

(12) REG—VIII-1, IX-6, X-2, XII-7.
RED—V-6, 7.
SRED—I-5, II-5.
SREJ—I-3, 4, II-3, 5, 8.
REK—XIII-South-face-12.
PELA—II-2.
PER—IV-6.
PE All. Kos.-I-2.
RE Erragudi-IV-8, XIII-3.

(13) REG—VI-2, VII-14, VIII-2, XII-7.
REJ—IX-5.
REK—IV-9, 10, 12, V-15, VIII-22, IX-25, 26, XII-31, 32, XIII-37.
MRE Rupnath-3.
PELA—IV-7.

(14) REK—II-4, IV-9, V-13, 15, VII-21, IX-24.
PELN—V-11.

(15) RED—IV-7.
REJ—I-4, IV-8, IX-3.
MRE Rupnath—2, 5.
MRE Jatinga Rameshwar—18.

PE All. Kos.-II-3.
MRE Rajula Mandagiri-5, 12, 13.

(16) REK—1-2, V-16, VI-17.
PELA—I-3, II-4, V-12, VI-4.
PER—V-7.

(17) REK—VI-5.

(18) MRE Bairat—4.
RE Erragudi—VII-4, X-1.

(19) REG—X-4 (in *Aṅata*).

APPENDIX NO. 2

Ā

(Angular)

(a)

(1) REG—III-1, IV-12, VI-7, 8, IX-2, XI-3, 4, XII-3, 4, 5, 6, 9.

(2) REG—VI-1, 12, IX-1.

(3) REG—IV-9, V-5, XI-1.

(b)

(4) RED—I-4, IV-3, VI-3.
REJ—I-3, II-3, X-1.
SREJ—I-3, 5, II-1, 2, 7, 13.
PE All Kos—III-1 (in Āsinave)
MRE Rupnath—1, 3
MRE Brahmagiri—1.
MRE Siddapur—3, 4.

(5) REK—III-7
RED—IV-6, V-1, 2, 4, VI-5, IX-1, 7.
REJ – I-1, VI-1, 3, 4.
SREJ – II-12.
MRE– Brahmagiri—9, 11.

(6) MRE—Erragudi—22a, 23.

(Cursive)

(a)

(7) REG—I-12, III-1, 6, IX-6.
MRE—Gujjara-2, 3.

(8) REG—VI-6, XII-6.

(9) REG—I-9, 11, VI-8.

(10) REG—IX-1.

(11) MRE Erragudi-25a.

(b)

(12) REK—VI-17, XIII-38.
RED—III-1.
SRED—I-16.
SREJ—I-9.
PEDT—I-1, III-20, IV-1, 8, 10, 19, VII-11, 20, 22, 23, 24, 25, 26, 28, 29, 31.
PEDM—II-4, III-1, 3, IV-9, 14.
PELA—II-1, IV-2, 4, V-1, 6, VI-1.
PELN—I-1, II-3, IV-1, 2, 5, 11.
PER—II-1, III-2, IV-1, 4, 7, VI-1.
PE All. Kos.-I-1, II-2, III-1, IV-1, 4, V-1.
MPE Queen's-3.
MPE Kosambi-1.
MPE Sarnath-4, 5, 6, 9.
MPE Lumbini-2.
MRE Sahasram-1, 4.
MRE Jatinga-Rameshwar-16.
RE Erragudi—III-1, IV-10, XI-1.

(13) PEDT-II-13, III-18, IV-15, V-9, VII-14, 22.
PELA-I-1, II-3, III-1, 2, VI-3.
PELN-II-1, III-3, IV-4, 9, V-1, 7, VI-1.
PER-I-1, IV-2, V-5.
MPE Nigliva-3.
Slab Ins. Bhabru-1, 2.

RE Erragudi-VIII-1, XI-1.
RE Bombay-Sopara-IX-2, 3, 4.

(14) REK-III-6, V-14.
PELN-IV-9 (in Āvuti).

(15) REK-VI-18.
RED-I-1, VI-1, 4.
SRED-I-4, 6, 10, 17, II-6, 9.
REJ-IX-5.
SREJ--I-7.
PEDT-II-11, VII-22, 23, 25, 29, 31
PER-IV-3.
MPE Sarnath-9.
MRE Siddapur-10.
MRE Erragudi-1.

(16) PE All.Kos.-II-1,

(17) MRE Erragudi-25 (in Āroke).

(18) MRE Erragudi-13a, 15, 19, 20,
MRE Rajula Mandagiri-10.

(Mixed Forms)

(a)

(19) REG—1-3.
MRE Erragudi--8.

(20) REG—IX-2.

(21) REG—II-2.

(b)

(22) RED—II-3, VI-3.
REJ—III-I.
PER—III-2, VI-3.

MRE Siddapur—20.
MRE Rajula Mandagiri—7, 8.

(23) RED—IX-1.
SRED—I-3.
REG—I-5.
MRE Jatinga Rameshwar—18.

(24) MRE Erragudi—16.

(25) RED—III-1.
PER—III-1.

(26) REK—VI-19, 20, IX-24, 26.
PELA—IV-5.
PELN—VI-4.
PER—IV-5, 9.
MPE Kosambi—4.

(27) REK—XI-30.
SRED—II-2.
REJ—IV-3.
SREJ—I-20, II-13.
MRE Bairat—1.

(28) REK—I-1, IV-10, 12, 13.
REJ—VI-6.
PELA—III-2, IV-1.
PER—V-1.

APPENDIX NO. 3.

I

(1) REG—IV-11, VII-1, 2, IX-8, XI-3, 4.
REK—I-3, III-7, IV-12, VI-20, VII-21, VIII-23, IX-25, 26, 30, 31, 34, 35, 36, 38, South-face XIII-3, 4, 15, XIV-19.
RED—I-4, III-1, 2, IV-7, 8, V-6, 7, 8, VI-5, 6, 7, VII-1, IX-2 X-1, XIV-1.
SRED—I-2, 5, 6, 9, 10, 11, 16, 17, 19, II-3, 7, 9, 10.
RE Bombay Sopara—VIII-6.
REJ—I-1, 4, III-1, VI-5 6, 7, VII-1, IX-4-6, X-1.
SREJ—I-1, 3, 4, 5, 6, 9, II-1, 3, 4, 14, 15.
PEDT—I-2 II-15, III-17, 18, 19, 21, 22, IV-2, 14, 19, V-2, VI-4, 8.
PEDM—II-5, III-2, 4, 5, 6, IV-8, VI-1.
PELA—I-1, 5, III 1, 2, 3, IV-7, 9, V-1, VI-3, 4.
PELN—I-1, II-4, III-1, 2, 3, 4, IV-8, V-1, VI-3, 5.
PER—I-1, 5, II-3, III-1, 2, 3, IV-7, 9, VI-2.
MPE Sanchi—7.
MPE Sarnath—5, 6.
MRE Rupnath—2, 3, 4.
MRE Sahasram—4, 5, 6, 7.
MRE Maski—6.
MRE Brahmagiri—1, 3, 4, 5, 6, 7, 8, 10.
MRE Siddapur—2, 7, 8, 12, 13, 17.
MRE Jatinga Rameshwar—12, 14.
MRE Erragudi—9.
Cave Ins. Barabar—II-2, III-3.
Slab Ins. Bhabru—6.
MRE Rajula Mandagiri—3.
RE Erragudi—I-1, VII-3, XI-4.
MRE Gujjara—2, 4, 5.

(2) • REG—I-1, 2, III-1, IV-10, 12, IX-6, 8.
• REK—IV-11.
SREJ—I-10.
PER—V-1.
PE All. Kos.—I-1, 4, II-3, III-1, IV-1, 2, V-1, VI-2, 3.
MRE Sahasram—3.
MRE Siddapur—15.
MRE Errgudi—4, 22.
Slab Ins. Bhabru—4, 8.

(3) • REG—III-3, VI-12, 14, IX-8-9, XI-2, XII-3, 7, 9, XIII-5, 9, 12.
PEDT—VII-12, 15, 24, 26, 27, 28, 29, 30, 31.
PELA—II-3, III-2, 3, IV-1, VI-5.
PELN—I-6, III-4, IV-1, 10, VI-6.
PER—III-1, IV-1, 8, VI-3, 4.
MPE Sarnath—7.
MRE Maski—4.
MRE Erragudi—8.

(4) • • REG—IX-7, X-2.
• PEDT—I-9, VI-10.
MPE Sarnath—8.
MRE Erragudi—24.
Cave Ins. Barabar—I-2.

APPENDIX NO. 4

U

(1) L REG—VI-10, IX-3, XII-4, XIII—4.
REK—II-6, VI-18, VII-21, IX-24, X-28, XII-33, XIII-37, 38.
RED—II-4, VI-4, VII-2, IX-1, X-4.
SRED—I-13.
REJ—II-4, VI-2, 5, VII-1, X-3.
SREJ—I-7.
PEDT—I-5, 7.
PEDM—IV-13.
PELA—I-4, IV-9.
PELN—I-3, 5, IV-3, 10.
PER—I-2, IV-3, 8.
PE All. Kos.—I-2, 3.
MPE Sarnath—7.
MPE Lumbini—3, 4.
MRE Sahasıam—1, 4.
MRE Bairat—2, 3, 6.
MRE Maski—3.
MRE Brahmagiri—3.
MRE Siddapur—5.
RE Erragudi—VI-3, X-4.
MRE Gujjara—1, 4.

(2) L REG—VI-9, X-3.
REK—VII-21, X-29, XII-32.
RED—VI-5.
REJ—VI-4, X-3.
PEDT—IV-18, VII-23.
PELA—I-3.
PER—I-3.
MPE Sarnath—7.
MRE Rupnath—1, 3.
RE Bombay-Sopara—IX-2

(3) MRE Sahasram—4.
MRE Siddapur—6.

(4) PELA—IV-3.
PE All. Kos.—IV-3.

APPENDIX NO. 5

E

(1) ▷ REG—I-6, 10, 11, 12, II-1, 3, III-1, 3, IV-7, 11, V-1, 3, 9, VI-1, 8, 10, VIII-1, 3, 5, IX-2, 3, 4, 5, 7, X-2, 3, 4, XI-1, 3, XII-4, 7, 8, 9, XIII-5, 11, XIV-1, 3, 5.

REK—X-28, XI-30, XII-34, XIII-36, 38, 39.

SREJ—I-4, 7, 8, 9, 10, II-2, 5, 7, 12, 13.

PEDT—I-5, 9, II-14, III-19, 21, IV-12, V-7, 8, 13, 17, 18, VI-8.

PEDM—II-5, III-3, IV-5, 6, V-7, 11, 14.

PELA—I-3, 5, II-3, III 2, 3, IV-6, V-5, 9, 11, 13, VI-4.

PELN—I-3, 6, II-4, III-2, 4, IV 7, 8, V-5, 6, 12, 14, VI-5.

PER—I-3, 4, II-3, III-2, 3, IV-6, 7, V-4, 7, 9, 11, VI-3.

MPE Sarnath—2, 3, 8, 9, 10.

MRE Rupnath—2, 3, 5.

MRE Sahasram—2, 4.

MRE Bairat—5.

Slab Ins. Bhabru—8

MRE Brahmagiri—2, 5, 12.

MRE Siddapur—5, 19.

MRE Jatinga Rameshwar—19.

MRE Erragudi—7.

MRE Rajula Mandagiri—2, 5.

MRE Gujjara—2, 3, 5.

RE Erragudi—I-3, IV-4, VIII-5, X-2, 4, V-6, XI-1, XII-7, 12, XIII-2, 3.

RE Bombay-Sopara—IX-4, 7.

(2) ◁ REG—IV-10.
REK—IV-12.
RED—IV-4, 6, 7, V-2, 4, 6, 7, VI-3, 6, VIII-1, 3, IX-2, 4, XIV-2.
SREJ—I-2.
PE All. Kos.—I-2, 4, II-3, VI-3.
REJ—I-2, 4, II-1, IV-5, V-7, VI-3, 6, VIII-1, IX 1, 3, XIV-2.

(3) △ REG—VI—1, 12, IX—1.
REK—I-4, IV-12, V-13, 15, 16, VII-21, VIII-23, IX-24, 25, XIII-South-face-15.
SRED—I-3, 7, 8, 11, 12, 13, 15, 16, 17, 18, 21, 22, 23, 25, II-2, 5, 6.
SREJ—I-6, II-7, 8, 14, 16.
PEDT—VII-14, 19, 20, 22, 23, 24, 25, 26, 27, 28, 31, 32.
PER—V-10.
MPE Queen's—2.
Slab. Ins. Bhabru—2, 3, 5, 6.

(4) PEDT—VII-21, 32 (in *Esa*).
PER—III-2 (in *Esa*).

(5) REK—III-7, XIII-31.
PER—IV-6 (in *Etena*)

(6) REK—XIII-South-face-13.

(7) REG—VII-2.
REK—I-2, II-6, IV-11, V-14, 15, VI-20.

(8) REG—XII-6- XIII—11.
SREJ—II-9.
PELA—IV-7, V-5 (in *Eti*).
PELN—V-10.

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APPENDIX No. 6

O

(1) ᒣ ᒪ REG—II-5, VI-3, IX-8.
REK—V-16.
PEDT—V-6, VII-27.
PELA—V-4.
PELN—V-4.
PER—V-3.
MPE Kosambi—4.
MPE Sanchi—5.
MPE Sarnath—4.

(2) REK—II-5.

(3) REK—VI-18.

(4) RED—II-3, V-6, VI-2.
REJ—II-3, VI-2.

APPENDIX No 7

Ka

(1) + REG—I-2, 4, 6, II-2, 3, III-2, 4, V-1, 2, 3, 5, 7, 8, VI-1, 5, 8, 9, 10, 11, 13, VII-2, VIII-1, 2, IX-1, 2, 3, 6, 8, 9, X-2, 3, 4, XI-2, 3, 4, XII-2, 3, 4, 5, 6, 7, 8, 9, XIII-1, 3, 4, 5, 6, 8, 9, 13, XIV-3, 4, 5, 6, Below REG-XIII.

REK—I-1, 2, II-5, III-7, IV-9, 10, V-13, 14, 15, VI-17, 18, 19, 20, 21, VII-21, 22, IX-24, 25, 26, X-27, 28, 29, XII-31, 32, 33, 34, XIII-35, 38, 39, South-face-7, 8, 13, 14, 15, 16, 17, 18, XIV-20, 22, 23.

RED—II—1, 2, III-2, IV- 1, 2, 6, V-1, 2, 3, 4, 5, 6, 8, VI-1, 2, 3, 4, 5, 6, 7, VII-2, IX-2, 3 5, X-3, 4, XIV-2, 3.

SRED—I-2, 5, 6, 7, 8, 9, 11, 12, 16, 18, 20, 21, 23, 24, 25, 26, II-1, 3, 5, 6, 7, 8, 9, 10, 11.

REJ—I-1, 2, 4, II-1, 2, III-1, 2, IV-1, VI-1, 2, 3, 4, 5, 6, 7, VII-2, IX-2, 3, 4, 6, X-2, 3, XIV-2.

SREJ—I-1, 3, 4, 5, 6, 8, 9, 10, 11, 12, II-1, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 16.

PEDT—I-3, 6, 7, II-11, 13, 14, 16, III-17, 18, 20, 21, 22, IV-2, 4, 5, 7, 8, 9, 12, 13, 14, 17, 18, V-2, 3, 4, 5, 6, 8, 9, 14, 17, 19, 20, VI-2, 4, 6, 7, VII-11, 12, 15, 17, 18, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31.

PEDM—II-1, 2, 4, 5, 6, 7, III-1, 2, 4, 5, 6, IV-5, 7, 12, 13, V-2, 7, 8, 11, 15.

PELA—I-2, 4, II-1, 3, 4, III-1, 3, IV-1, 2, 3, 4, 5, 6, 7, 8, 9, V-2, 3, 4, 5, 6, 9, 11, 12, 13, VI-1, 2, 3, 4.

PELN—I-2, 4, II-1, 3, 4, 5, III-1, 2, 3, 4, IV—1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 14, 15, VI-2, 3, 4.

PER—I-2, 3, II-1, 2, 3, III-1, 3, IV-1, 2, 3, 4, 5, 6, 7, 8, 9, V-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, VI-1, 2, 3.

PE All. Kos.—I-2, II-1, 2, 3, III-1, IV-I, 3, 4, V-1, 2, 3, 8, VI-1, 2.

MPE Queen's—3, 4, 5.

MPE Kosambi—1.

MPE Sanchi—7.

MPE Sarnath—1, 7, 10.

MPE Lumbini—3, 4.

MPE Nigliva—2.

MRE Rupnath—1, 2, 3, 4, 5.

MRE Sahasram—1, 2, 3, 4, 5.

MRE Bairat—2, 4, 5, 6.

MRE Maski—1, 2, 5, 6.

MRE Brahmagiri—2, 3, 4, 5, 6, 11, 12.

MRE Siddapur—4, 5, 6, 7, 8, 9, 13, 21.

MRE Jatinga Rameshwar—3, 17, 19, 21.

MRE Erragudi—2, 3, 4, 5, 6, 9, 11, 15, 21, 23, 24.

Cave Ins. Barabar—I-?, II-3, 4, III-1, 3.

Slab Ins. Bhabru—2, 4, 7, 8.

MRE Rajula Mandagiri—1, 2, 3, 4, 5, 6, 12, 14.

RE Erragudi—V-1, 2, 6, VI-4, VIII-2, IX-4, 7, X-1, 2, 3, 4, XI-3, XII-6, 8, 11, 14, XIII-17, 18, 25, 27, 30, 37.

MRE Gujjara—1, 2, 3, 4.

RE Bombay-Sopara—IX-2, 6.

(2) ┼ REG—II-3, 5, V-1 (in *Karoti*), 7, VI-6, X-3, XI-2, XII-4, 5, XIII-1, XIV-3.

REK—I-2, 4, II-4, 5, IV-12 (in *Kammaṃ*), V-13, 14, VI-19, 20, VIII-22, X-28, XII-32.

RED—X-1.
SRED—I-1, II-7 (in *Kaṭuṃ*), 8 (in *Hakaṃ*).
REJ—I-2 (in *Kataviye*',
PEDT—II-11 (in *Kayāne*), 16, V-4, 9, 17, VII-24, 28, 29, 30, 32.
PELA—IV-2, 7, 9, V-5.
PELN—IV-8, V-4, 5.
PER—III-3, IV-2, V-5.
PE All. Kos. II-2.
MPE Sanchi—1, 4,
MPE Sarnath—6, 7, 9.
MRE Brahmagiri—4 (in *Khudakena*), 6 (in *Pakameyu*).
MRE Erragudi—4, 21, 22, 23, 24.
MRE Rajula Mandagiri—3, 11.

(3) +
PELA—V-2 (in *Caka*...).
PER—II-3 (in *Thitikā*)
MRE Sahasram-5 (in *Lakamantu*).
MRE Gujjara—3 (in *Khudakena*)

(4) +
REK—VI-18, (in *Hakaṃ*), XIII-36 (in *Kaligyāni*).
PEDT—IV-14 (in *Kaṭe*).
PELN—VI-4 (in *Kimaṃ*).
MPE Sarnath—8.
MRE Rupnath—3 (in *Kaṭe*).

(5) +
REG—X-3 (in *Kinti*).
RED—VI-3 (in *Sāvakaṃ*).
SRED—I-13.

(6) +
REG—VI-6 (in *Dāpakaṃ*).
RED—X-2 (in *Palakamati*).
REJ—VI-5 (in *Kamatala*).
SREJ—II-1 (in *Vacanika*).
PEDT—III-21 (in *Kālanena*), V-13, VII-24 (in *Kālapita*).
PER—IV-6 (in *Kamāni*), V-5 (in *Mūlike*).

(7) REG—VI-3, 11 (in *Sarvaloka*), X-3 (in *Paratrikāya*), XII-5, (in *Karoto*), XIII-11.
REK—VI-17, (in *Kanta*), XII-31 (in *Kit*).
RED—VI-1 (in *Atikantaṃ*), X-2 (in *Etakāye*), 3 (in *kinti*).
SRED—II-3 (in......*kāye*).
REJ—II-2 (in *Cikisā*).
SREJ—I-4.
PEDT—IV-19, VII-27 (in *Bahukā*).
PELA—I-4 (in *Ukasā*), V-4 (in *Gāmakapote*).
MRE Bairat—5 (in *Cakiye*).
MRE Siddapur—12 (in *Pakameyu*).
MRE Erragudi—17 (in *Raṭhikāni*).
Slab Ins. Bhabru—4 (in *Samusake*)

(8) PEDT—IV-13 (in *Kamāni*).
MPE Sanchi—8.

(9) REG—IV-10.
REK—II-5, IV-11, V-11, V-15 (in *Mahālake*).
REJ—X-1 (in *Kiti*).
PEDT—VII-25 (in *Ājīvikesu*).
MRE Erragudi—7 (in *dakena*).

(10) SREJ—II-1 (in *Hakaṃ*).
MRE Rupnath—2 (in *Pakamasa*).

(11) RED—X-4 (in *Khudakena*).
SREJ—I-5 (in *Bahuke*).
PELN—V-6 (in *kāni*).

APPENDIX No. 8

Kha

(1) 𑀔 REG—I-2, 10, II-8, IV-11, V-9, VI-13, XII-9, XIII 4, XIV-3, 5, Below REG-XIII.

RED—II-4, III-2, IV-7, 8, V-4, 5, VI-3, 6, VIII-1, IX 2, X-4, XIV-2, 3.

SRED—I-5, 7, 17, 18, 19, 24, II-1, 5, 8, 9, 10.

REJ—I-1, 2, 4, II-4, III-2, V-6, VI-6, IX-3, X-3.

SREJ—I-3.

PEDT—I-2, 4, 5, 10, II-12, 13, 14, 15, III-18, 19, IV-2, 5, 6, 11, 12, V-7, 15, 16, 17, VI-2, 3, 4, 6, 7

PEDM—II 4, III 2, 3, 6, V-12.

PELA—I-1, 2, 3, 6, II-2, 3, III-1, 2, 3, IV-1, 3, 5, 6, V-5, 10, 11, 12, VI-1, 2, 3, 4.

PELN—I-2, 3, 6, II-2, 4, III 1, 2, 4, IV-1, 3, 6, 7, V 5, 11, 12, 14, 15, VI-1, 4, 6

PER—I-1, 2, 3, 5, II-1, 2, 3, III 1, 2, 3, IV-1, 3, 5, 6, V-2, 8, 9, 10, 11, VI 1, 2, 3, 4.

PE All Kos.—I-1, 2, 4, II-1, 2, 3, III-1, V-4, VI-2.

MPE Kosambi—3.

MPE Sanchi—5

MPE Sarnath—3, 4, 6, 7.

MRE Rupnath—2, 3, 4, 5.

MRE Maski—5, 6.

MRE Brahmagiri—2, 4.

MRE Siddapur—5, 6, 9, 11.

MRE Erragudi—5, 9.

Slab Ins. Bhabru—7, 8.

MRE Gujjara—3, 4.

RE Erragudi—I-5, V-4, 5, 7, VIII-2.

(2) REK—I-2, III-7, IV-12, V-15, X-28, XII-34, XIII-37, South-face-15, 16, XIV-19.
SREJ—I-1, 4, 7, 9, 10, 12, II-1, 2, 3, 4, 6, 7, 12, 14, 16.
PELN—V-3
MPE Kosambi—3.
MPE Sarnath—4, 5.
MRE Sahasram—3. 4, 8.
MRE Maski—4.

(3) REK—X-28 (in *Kho*), XIV-23 (in *Likhite*).

(4) PELA—VI-2.
PELN—V-13, VI-2, 3, 4.
PER—I-3, III 1, IV-3.

(5) REJ—II-4 (in *khānāpitāni*).
SREJ—I-11.

(6) REG – IV-12, VI-12, IX-7.
SRED—I-9.
PEDT—V-18, VI-10
MRE Siddapur—9.
Cave Ins. Barabar—II-3.
Slab Ins. Bhabru—3.

(7) REG—V-6, VI-5.
RED—IX-3.
SRED—I-14, 22, 23, 25, II-10.
REJ—VI-3.
RE Bombay-Sopara—VIII-1.
PEDT—III-17, V-3, 19, VI-4, VII-30.
PEDM—II-3, V-11, 13, 15.
PELA—V-2.
PELN—I-4, V-4, 11.
PE All. Kos.—VI-2 (in *Pativekhāmi*), 3.
MPE Sanchi—3.
MRE Jatinga Rameshwar—4, 21.

(8) ɭ PEDT—VII-23, 24, 27.

PELA—III-1 (in *Dakhanti*), 2 (in *Cu Kho*), V-11 (in *Nilakhitaviye*), 13, VI-5.

PLEN—VI-3.

PER—III-2 (in *Dakhiye*).

MRE Brahmagiri—13.

(9) ʔ MRE—Erragudi-2-

(10) ɗ REK—II-6, IV-13, V-15, 17, VI-18, 20, VIII-1, IX-24, 25, X-28, (in 2nd *Kho*), XIII-South-face-14, XIV-21, 23.

APPENDIX NO. 9

Ga

(1) ∧ REG—I-11, 12, II-5, III-6, IV-4, V-5, 6, VI-12, 14, IX-1, 2, 3, 4, 6, 7, XI-1, XII-3, XIII-1, 4, 6, 8.

REK—II-5, 6, III-8, V-15, 16, VI-18, 20, IX-25, 26, XII-31, 32, 33, 37, 38.

RED—II-3, 4, IV-2, V-4, 6, VI-2, 6, 7, VIII-3, IX-2, 3, 4, 5, 6, 7, X-3.

SRED—I-1, 6, 13, 15, 16, 20, 24, II-4, 9.

REJ—I-4, VI-2, 6, 7, VII-1, IX-2, 6.

SREJ—I-1, 2, 3, 5, 8, 9, 10, II-4, 5, 7, 13.

PEDT—I-3, 4, 5, 7, 10 II-13, 20, IV-6, 20, V-3, 5, 6, 7, 8, 14, 16, 18, VI-8, VII-23, 24, 27.

PEDM—II-4, III-4, V-7, 10, 13, VI-1.

PELA—I 2, 3, 4, 6, II-2, III-2, IV-3, 10, V-2, 3, 4, 5, 9, 11, 12.

PELN—I-2, 3, 5, 7, II-3, III-3, IV-3, 11, V-3, 4, 5, 10, 12, VI-5

PER—I-2, 4, 5, II-2, III-2, IV-3, V-2, 3, 4, 8, 9, 10, VI-4.

PE All. Kos.—I-2, 3, 4, II-2, V-2, 3, VI-3.

MPE Queen's—3, 4.

MPE Kosambi—2.

MPE Lumbini—2, 3, 4, 5.

MPE Nigliva—3.

MRE Sahasram—4.

MRE Bairat—6.

MRE Maski—3, 5.

MRE Brahmagiri—9. 10.

MRE Siddapur —1, 3, 10.

Cave Ins. Barabar—III-3.

Slab Ins. Bhabru—2, 5, 6.

RE Erragudi—VIII-5, IX-2, 4, 7, XII-4, XIII-18.
MRE Gujjara—3, 4.
RE Bombay-Sopara—IX-2, 6, 8.

(2) REG—IX-4 (in first *Maṅgala*).
REK—XI-29.
REJ—II-3 (in *Pasopagāni*).
RE Bombay-Sopara—VIII-10.
PELA—I-3.
PE All. Kos.—I-2 (in *agena bhayena*), IV-4.
MPE Sanchi—8.

(3) REK—I-4, VI-21, VIII-23, IX-27, X-28, XII-31, XIII-36, South-face—6, 7.
REJ—II-3 (in *Munisopagāni*).
PEDT—V-14 (in *Bhogasi*), VII-26.

(4) REG—II-9, VI-3 (in *Gabhā...*), VIII-5, IX-1, 9 (in *Svagāradhi*), XII-5, 7.
REK—VII-21.
PEDT—VII-23 (in *Magesu*), 25.
PELA—V-9 (in (*Bhogasi*).
MRE Erragudi—18.
MRE Rajula Mandagiri—9.

(5) REK—IX-24 (in first *Maṅgala*).

(6) REG—II-6, VI-2, XIII-1 (in...*gesu*), 2, 3.
REK—IV-10, VIII-22, XIII-39 (in *Bhage*).
PELN—V-10, (in *Nāga*).
MRE Maski—6.

(7) REG—VI-3 (in *Gāra*), IX-5, XII-3 (*Vaoaguti*).
REK—IX-24, 26 (both in 2nd *Maṅgala*), XII-34, XIII-36 (in 2nd *Gulumate*), 39 (in *Gulumate*).
RED—VII-2.

(8) ∩ MRE—Erragudi-8.

(9) ⌈ PEDT—VII-29.
MRE Siddapur—17.

APPENDIX NO. 10

Gha

(1) REG—X-1, XIII-4, XIV-2.
REK—IV-9.
RED—IV-2 (in *Dhamaghosa*), XIV-1.
REJ—XIV-1.
SREJ—I-9,II-16.
PEDT—IV-8, 11.
PEDM—IV-2.
PELA—IV-4.
PELN—IV-4, 6.
PER—IV-4, 5,
MPE Kosambi—2.
MPE Sanchi—8.
MPE Sarnath—3, 4, 5.
MRE Bairat—3.
MRE Maski—3.
MRE Brahmagiri—3, 12.
MRE Siddapur—6.
MRE Erragudi—3.
Cave Ins. Barabar—III-3.
Slab Ins. Bhabru—2, 5.
RE Erragudi—IV-4.
MRE Gujjara—1.

(2) REG—IV-3, X-I.
REK—XIV-20.
SRED—II-11.
PEDT—VII-25.
MPE Sanchi—4.

(3) REK—XIII-37.
RED—IV-2 (in *Bhelighoso*).

APPENDIX NO. 11

Ca

(1) d REG—I-3, 4, 6, II-2, 5, 6, 7, 8, III-7, 8, 9, 11, 12, V-2, VI-3, 5, 7, 11, 12, 13, VI-1, 2, VIII-1, 3, 4, IX-1, 2, 3, 6, 8, 9, X-2, 3, 4, XI-4, XII-1, 3, 4, 5, 6, 7, 8, 9, XIII-6, 7, 8, 10, 12, XIV-2, 3, 6.

REK—II-4, 5, 6, III-7, 8, IV-10, 11, V-13, 15, 16, VI-18, 20, VII-21, 22, VIII-22, IX-24, 26, X-28, XII-31, 34, XIII-38, 39, South-face-5, 6, 7, 8, 12, 15, 17, 18, XIV-21.

RED—II-3, 4, III-2, 3, IV-1, 2, 3, 4, 5, 6, 7, V-2, 4, 5, 6, 8, VI-2, 3, 4, 5, 6, VII-1, 2, VIII-1, 2, 3, IX-1, 2, 3, 4, X-3, 4, XIV-3.

SRED—I-3, 6, 9, 10, 14, 16, 18, 19, 21, 23, 24, II-2, 5, 6, 7, 8, 9, 10, 11.

REJ—I-2, 4, II-1, 3, 4, III-1, 2, 4, IV-2, 5, 7, 8, V-2, VI-2, 3, 5, 6, 7, VII-1, 2, VIII-2, IX-1, 2, 3, 5, X-1, 3, XIV-2.

SREJ—I-7, 11, 12, II-1, 2, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16.

RE Bombay-Sopara—VIII-7, IX-2, 5, 6, 7, 8, 9, 10.

PEDT—I-5, 6, 7, 8, II-11, 12, 13, 14, 15, 16, IV-4, 7, 8, 9, 10, 11, 15, 19, 20, V-3, 7, 8, 9, 12, 15, 16, 18, VI-6, 8, VII-13, 16, 22, 24, 26, 27, 28, 29, 30, 31 32.

PEDM—II-2, 3, 4, III-3, IV-1, 8, V-4, 5, 10, 13.

PELA—I-4, 5, II-1, 2, 3, 4, III-2, IV-3, 4, 5, 7, 10, V-2, 4, 5, 6, 7, 8, 10, VI-3, 4.

PELN—I-3, 4, 5, II-1, 2, 3, 4, 5, III-2, 3, IV-4, 5, 6, 9, 11, V-2, 5, 6, 8, 9, 12, 13, VI-4, 5.

PER—I-3, 4, II-1, 2, 3, III-2, IV-3, 4, 5, 7, 9, V-2, 4, 5, 6, 7, 8, 9, 10, VI 3, 4.

PE All. Kos.—I-2, 3, 4, II-1, 2, 3, IV-2, 4, V-1, 3, 5, VI-3.
MPE Kosambi—3.
MPE Sanchi—8.
MPE Sarnath—3, 5, 7, 8, 9.
MPE Lumbini—2, 3, 5.
MPE Nigliva—1, 3.
MRE Rupnath—1, 2, 3, 4, 5.
MRE Sahasram—1, 3, 4, 5, 6, 7.
MRE Bairat—2, 5, 6.
MRE Maski—6, 7.
MRE Brahmagiri—1, 3, 6, 7, 8, 9, 11, 13.
MRE Siddapur—2, 7, 12, 13, 18, 19, 20, 21.
MRE Jatinga Rameshwar—1, 10, 14, 16, 18, 19, 20.
MRE Erragudi—8, 11, 17, 21, 22, 23.
Slab Ins. Bhabru—1, 2, 3, 4, 5, 7, 8.
MRE Rajula Mandagiri—3, 5, 15.
MRE Gujjara—1, 2, 3, 4, 5.
RE Erragudi—III-2, IV-5, 11, V-5, 7, VII-2, 3, 5, VIII-4, IX-4, 10, X-1, 2, 3, 4, XII-9, XIII-6.

(2) REK—I-2, 4, II-5, 6, III-8, IV-9, 11, 12, 13, VII-21, IX-24, 25, XII-33, 34, XIII-36, 39, South-face-6, 16, 17, XIV-21, 23.
REJ—III-3.
PELA—I-4.
MRE Siddapur—14.
MRE Erragudi—4, 10, 18, 19, 21.

(3) MRE Erragudi—10.

(4) MRE— Erragudi-23.

(5) REG—II-5 (in *Ca Yāni*), 7, IV-8, 11, IX-4, XII-7, XIII-11, 12.

REK—III-8, IV-11, V-14, VI-19, 20, IX-26, X-28, XI-30, XII-31, 32.
RED—VII-2, XIV-2.
SRED—I-12, 13, II-5, 8.
SREJ—I-2, 3, 6, 9, 11, II-11.
PEDT—IV-7, V-18, VII-30.
PEDM—II-6, III-4, IV-14, V-6.
PELA—I-3, IV-7, V-12.
PELN—I-4, 5, IV-8, V-11, VI-5 (in *Cu*).
PER—II-2 (in *Pi Ca Me*), IV-4 (in *Cakāni*), V-10.

(6) REG—II-4, 5, 6, 7, III-2, 6, IV-1, 3, 10, V-2, VIII-4, XII-4, 8.
REK—IV-13, VIII-23, IX-27 (in *palata cā*), X-27, XIII-36, 39.
RED—II-2.
SRED—I-10, II-9 (in *Hevaṃ Ca*).
SREJ—I-6 (in *Ca*), 10, 11, II-13 (in *Hevaṃ Ca*).
PELN—V-13.
PER—I-4 (n *Capalaṃ*), IV-7 (in *Ca Āvā*).
MRE Brahmagiri—12.
MRE Siddapur—18.
RE Erragudi—XIII-1, 7, 2nd. side-5.

(7) REG—IX-3, XII-9.
REK—XI-30 (in *Palata Cā*), XIII-36, South-face-17, XIV-21.
RED—VII-1 (in *Ca*), VIII-2 (in *Dasane ca dāne*).
REJ—II-2, IV-6.
SREJ—I-4, 9.
PER—III-2 (in first *Cu*).
MPE Queen's—1.
MRE Bairat—3.

(8) REJ—VII-3, X-1, XII-8, (in *Vacabhumikā*), XIII-4, 8.
REK—IV-9, 12, V-17, IX-25, X-27 (in *Hida Cā*).

SREJ—I-9 (in *Svagaṃ Ca*).
PELA—V-5.

(9) [Brahmi character] REJ—VI-4 (in *Aṭhasantīlanāya Ca*).
PEDT—VII-27 (in *Dalakanaṃ pi ca*).
MPE Sanchi—4.
MPE Sarnath—5, 6, 7, 9.

APPENDIX NO. 12.

Cha

(1) REG—I-12, II-4, 5, 8, VII-1, 2, VIII-4, X-2, 4, XII-5, XIII-1, 6, 11, XIV-5.
RED—I-4, VI-3, 5, VII-1, 2, VIII-3, X-1.
SRED—I-2, 5, 6, 7, 9, II-1, 3, 4, 6.
REK—I-1, V-14, VI-18, VII-21, IX-26, X-27, 28, XII-32, 33, XIII-35, South-face-1, XIV-22.
REJ—III-6, VII-1, X-1.
SREJ—I-1, 3, 6, II-3, 4, 5, 8.
PEDT—II-16, IV-9, 14, 18, V-4, 5, 13, VII-12, 15, 23.
PEDM—II-7, IV-8, V-6.
PELA—II-4, 6, 7, 9, V-3, 8.
PELN—II-5, IV-5, 8, 10, V-3, 4.
PER—II-3, IV-4, 8, 9, V-2, 7.
PE All. Kos. II-3, IV-1, V-2.
MPE Queen's—4.
MPE Sanchi—7.
MRE Rupnath—1.
MRE Sahasram—1.
MRE Maski—6.
MRE Brahmagiri—2.
MRE Siddapur—6.
MRE Erragudi—2.
Slab Ins Bhabru—6
MRE Gujjara—1.
RE Erragudi—V-2, VII-3, 4, X-3.

(2) RED—VII-1 (in *Ichati*).
SRED—I-2 (in *Ichāmi*).
REK—VIII-23, X-28.
REJ—VII-1, 2.
PELA—IV-4.

PER—IV-7.
MRE Rupnath—1.

(3) ക SRED—I-11.
REJ—I-1.
SREJ I-2, II-1.
PELA—IV-9 (in *lohā*).
PELN—V-9.
PER—V-3.
PE All. Kos.—IV-3, V-2.

(4) ക REK—V-14.

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APPENDIX No. 13

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(1) 𑀚 REG—I-3, 5, 6, II-1, 3, 4, III-1, 2, IV-4, 8, V-1, 7, VI-3, 5, VII-1, VIII-1, 2, 4, IX-1, X-1, 2, 3, XI-1, XII-1, 5, XIII-2, 8, XIV-4.

REK—I-1, 2, 3, II-5, IV-13, V-13, 15, VI-17, 18, VII-21, VIII-22, 23, IX-24, X-27, XIII-35, South-face-XIII-6.

RED—I-1, 2, III-1, IV-2, 3, 7, 8, V-6, VI-1, 2, VII-1, VIII-1, 2, 3, IX-1, 2, XIV-1, 2, 3.

SRED—I-5, 10, 12, 15, 20, 25, 26, II-3, 4, 7, 8.

REJ—I-1, 2, 3, 4, II-1, 2, III-1, 4, IV-2, VI-1, 2, VIII-4, IX-I, 2, X-1, 3, XIV-1, 2.

SREJ—I-3, 5, 6, 10, II-1, 3, 4, 5, 10, 14.

PEDT—I-1, II-10, 15, IV-3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 17, 19, V-2, 4, 5, 9, 11, VI-1, 7, 8, VII-12, 13, 14, 15, 22, 23, 25, 26, 28, 30, 31.

PEDM—II-1, 6, III-1, IV-5, 11, V-2, 4, 8, 11.

PELA—I-1, II-1, 4, III-1, IV-1, 4, 5, V-9, V-9, VI-4.

PER—I-1, II-1, IV-2, 3, V-1, 6, 8, VI-1.

PE All. Kos.—I-1, II-1, 3, III-1, IV-3, 4, V-1, 2, 4, VI-3.

MPE Sarnath—9, 11.

MPE Lumbini—1.

MRE Rupnath—2, 3.

MRE Sahasram—2, 5.

MRE Bairat—7.

MRE Brahmagiri—6.

MRE Erragudi—10.

Slab Ins. Bhabru—1.

MRE Gujjara—1, 2, 4.

RE Erragudi—II-2, VI-7, VII-1, 3, VIII-4, 5, X-1, 5, XIII-4.
RE Bombay-Sopara—IX-1, 2, 4.

(2) REG—I-3 (in *Jīvaṃ*), III-2 (in *Rajūke*) IV-11, VI-4, XII-1, XIII-8, 10, 11, XIV-3.
RED—II-2, X-3.
REJ—I-1.
PEDT—IV-3, 7, V-14, 17, VII-16.
PELN—I-1.
MRE Brahmagiri—3.
MRE Erragudi—4.

(3) REG—I-4, 10, III-6, VI-1, IX-2, X-4, XIII-6.
SREJ—I-8, II-10, (in *Pajā he*).
RE Erragudi-XIII-17.

(4) REG—XII-4, XIII-5, 9, XIV-4.

(5) PELN—V-6.

(6) REG—IV-2, 5, XII-2.
MPE Sarnath-10.
MRE Siddapur-8.

(7) REG—IX-1 (in *Rājā*).
REK—IV-11 (in *Lajine*).

(8) REK—I-1, 2, II-4, IV-9, 10, 11, 12, X-28 (in *Lajā*), XIII-South-face-5, 7, 9.
SREJ—II-3 (in *Pajā*).
MRE Rupnath—5.
MRE Rajula Mandagiri—6, 8.

(9) REK—I-4, II-5, III-6, 7, 8, 10, X-28, XI-29, XII-31, 34, XIII-35, 36, 39, South-face-13, XIV-19, 20, 22.

PELN—II-1, 4, 5, III-1, IV-1, 2, 3, 4, 5, 6, 7, 8, 10, 11, V-2, 3, 8, 11, 12, VI-1, 5.
PER—IV-5, 6, 9, V-5.

(10) REK—XII-31, XIII-39, South-face-9.
MRE Maski-3.

(11) PELN—IV-2 (in *Lajūke*).
PER—IV-8, V-1.

(12) REK-XIV- 22 (in *Jane*).

(13) RED—I-3, II-1, III-3, IV-5, V-1.
REJ—IV-6, VII-1.
PEDT—VII-15 (in *Jane*), 17, 18, 19, 21, 22, 23, 24, 29.
PELA—IV-2, 3, 5, 6, 8, 10, V-1, 2, 3, 5, 7, 11, VI-1.
PELN—V-1.
PER—II-3, III-1, IV-1, 2, 3, 4, 5, 6, V-2 3, 4, 6, 9, VI-3.
MPE Lumbini—1, 4 (in *Jā* only).
MPE Nigliva—1.
Slab Ins. Bhabru—8 (in *Jānantu*).

APPENDIX No. 14

Jha

(1) REG—XII-9, XIV-2.
REK—XIV-20.
RED—VI-3, XIV-1.
SRED—I-10.
REJ—XIV-1.
SREJ—I-5, 7.
PEDT—I-7, IV-17, 18, V-10, VII-30.
PEDM—V-4.
PELA—I-4, IV-9, V-6.
PELN—I-5, IV-10, V-7, 8.
PER—I-4, IV-8, V-5, 6.
PE All. Kos.—I-3, IV-3, V-4.
RE Erragudi—XIV-2.

(2) REG—VI-7.
REK—VI-19.

(3) PEDT—VII-30 (in 2nd ***Nijhatiyā***).

(4) PELA—IV, 8, V-7.

APPENDIX NO. 15

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(1) REG—I-8, II-1, 4, III-1, 3, 6, IV-1, 5, 12, V-5, 8, VI-8, 14, VII-3, VIII-1, 5, IX-2, X-1, 3, XI-2, 3, 4, XII-5, 7, 9, XIII-1, 3, 4, 5, 11.

SRED—II-6.

MRE Brahmagiri—11.

MRE Jatinga Rameshwar—18.

(2) REG—I-2, 7, IV-2, 4, 8, V-8, VI-6, IX-5, 8, X-1, 4, XIII-3, XIV-1.

(3) REG—XII-2, 7.

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APPENDIX No. 16

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(1) C REG—IV-9, V-2, 6, 7, VI-2, 4, 8, X-4, XI-3, XIII-4, XIV-2, 4.

REK—II-6, IV-9, 11, V-13, 14, 15, 16, VI-17, 19, VII-22, IX-25, 26, X-28, 29, XI-29, 30, XII-34, 39, XIV-20.

RED—II-4, IV-1, 4, V-1, 2, 3, 4, 5, 6, 7, VI-1, 2, 4, VIII-3, IX-3, 7, X-1, 4, XIV-1, 3.

SRED—I-2, 10, 13, 15, 16, II-6, 8.

REJ—I-2, VI-1, 2, 4, VIII-3, IX-2, 3, 4, X-1, XIV-1, 2.

SREJ—I-1, 5, 7, 8, II-9.

RE Bombay-Sopara—VIII-7.

PEDT - I-3, 8, II-15, 16, III-2, IV-4, 8, 9, 11, 12, 14, V-2, 3, 5, 7, 9, 12, 14, 20, VI-4, 7, VII-17-21, 23, 25, 26, 31.

PEDM—II-4, 5, 6, III-3, IV-7, V-2, 15.

PELA—I-2, 5, II-2, 3, 4, III-1, 2, IV-4, 5, 6, 7, V-3, 5, 9, 13, VI-2, 4.

PLEN—I-2, 5, II-3, 4, 5, III-1, 2, IV-2, 6, 7, 8, V-4, 5, 7, 10, 14, 15.

PER—I-4, II-2, 3, III-1, 2, IV-2, 4, 5, 6, V-', 2, 3, 4, 5, 7, 8, 11, VI-1, 2, 3.

PE All. Kos.—I-1, 3, II-2, III-3, IV-1, V-1, 2, 3, 8, VI-2.

MPE Kosambi—2.

MPE Sarnath—3.

MPE Lumbini—4.

MRE Rupnath-3.

MRE Brahmagiri—12.
MRE Jatinga Rameshwar—21.
MRE Gujjara—2.
RE Erragudi—IV-2, V-1, VII-4, VIII-4, X-4, 5, XI-2, 4, XIII-7.

(2) PEDT—II-13, 14, III-2, V-5, 19, VI-3.
PEDM—III-2.
PELA—V-6.
PELN—V-2, VI-2.
PER—V-11.
MRE Rupnath—5.

(3) PEDT—VII-24, 25, 26, 27, 28, 29, 30, 31.
PELN—VI-3, 4.

(4) REG—XIII-6.
REK—I-2, IV-9, 11, V-14, 15, 16, IX-25, 26, XI-30, XIII-37.
RED—V-2.
SRED—II-7.
REJ—X-3.
SREJ—I-8.
MRE Siddapur—21.

(5) REG—VI-5.
REK—XIII-35, 38, XIV-22.
PEDT—VII-32.
PELA—IV-2, V-2, 6.
PELN—III-2, V-3.
PER—III-1.
MPE Sarnath—10.
MRE Sahasram—3.
RE Erragudi—V-4.

(6) SREJ—II-11.
PEDT—VII-28, 29.
PEDM—II-7.
PER—II-3, V-3.

(7) REG—VIII-4.
PELA—V-12.

(8) REG—X-4 (in *Usatena dukaram*).

(9) PEDM—IV-4.
MRE Rupnath—5.

APPENDIX No. 17

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(1) O

REK—I-3- III-7, IV-12, V-16, VI-18, 19, 20, IX-26, 27, XII-34, XIII-35, South face-15.
RED—I-3, IV-6, 7, V-4, 7, VI-1, 2, 4, 5, 6, IX-2, 5.
SRED—I-7, 19, 21, 22, 23, II-6, 9.
REJ—I-3, VI-2, 3, 4, 5, 6.
SREJ—I-4, 10, II-8.
RE Bombay-Sopara - VIII-5.
PEDT—II-15, V-4, 10, 15, VII-22, 25, 26, 27, 28, 32.
PEDM—II-5, V-3, 9.
PELA—III-3, V-7, 10.
PELN —II-4, III-3, V-7, 11, VI-3.
PER—II-3, III-2, V-2, 6, 8, VI-2.
PE All. Kos.—II-3, V-2, VI-2.
MPE Lumbini-5.
MRE Rupnath-3, 4, 5.
MRE Sahsram-4, 5, 7.
MRE Bairat—7.
Slab Ins. Bhabru—4.
MRE Maski—3.
MRE Brahmagiri—5, 6.
MRE Siddapur—13.
MRE Erragudi—8, 9, 17.
MRE Rajula Mandagiri—5, 8.
RE Erragudi—V-7, XIII-2nd. side-3.
MRE Gujjara—4.

(2) O

SRED—II-2.
REJ—VI-1.
SREJ—I-5.

(3) REK—VI-17, 18, 19, XIII-1.
PELA—II-3.
MRE Rupnath—4 (in *Aṭhe*), 5 (in *Silāṭhabhe*).

(4) RED—V-7 (in *Puṭhaviyaṃ*).

(5) MRE Brahmagiri—7.

APPENDIX No. 18

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(1) REG—II-2, III-5, V-4, VII-1, IX-3, XII-1, 2, 3, 4, 5, 6, 7, 8, XIII-5.
REK—II 4, III-8, 13, VIII-22, XII-32, 34, 35, XIII-37, South-face-8.
RED—V-3, VII-1.
REJ—II-1, VII-1.
PEDT—I-1, III-20, IV-1, 16, V-1, 6, 12, 15, VI-7, VII-23, 26.
PEDM—III-4, IV-9, V-5, 9, VI-1.
PELA—I-1, III-2, IV-1, 7, 8, V-1, 4, 10, 13, VI-1, 4, 5.
PELN—I-1, III-3, IV-1, 2, 6, 7, V-3, 7, 9, 11, VI-1.
PER—I-1, III-3, IV-1, 2, 6, 7, V-3, 7, 9, VI-1.
PE All. Kos.—I-1, IV-1, 2, V-1, 2, VI-3.
MPE Lumbini—3.
MRE Sahasram—4.
MRE Bairat—6.
MRE Maski—5.
MRE Brahmagiri—13.
Cave Ins. Barabar—II-2.
RE Erragudi—XII-1, 3, 4, XIII, 2nd side-5.
MRE Gujjara—4.

(2) REG—XII-4 (in *Ātpapāsaṇḍa*), 6.

(3) REG—XII-9 (in *Parapāsaṇḍa*).
MRE Rupnath—3.

(4) REG—XII-9.
REK—XII-31 (in *Savapāsaṇḍāna*).
PEDT—VI-1.
PER—V-1, VI-4.

(5) REG—XII-5 (in *Ātpapāsaṇḍa ca*).
REK—XII-31 (in *Palapasaṇḍa*).

(6) MRE Jatinga Rameshwar—21 (in *ḍe*)

(7) REK—XI-29, XII-33.

(8) MPE Queen's-3.

(9) REK-XII-32 (in *Atapāsaḍavaḍha*).

(10) REK-V-14.
Cave Ins. Barabar-I-1.

(11) REK-XII-33 (in *Atapāsaḍaṣi*).

APPENDIX No 19

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(1) PEDT—V-4, 8.
PEDM—V-11.
PELA—V-3, 5, 8, 11
PELN—V-3, 9, 12, VI-1.
PER—V-4, 3.

(2) PELN—V-6.
PE All. Kos.—V-2 (in *Duṙi* ?).

APPENDIX No. 30

Ḍha

(1) REG—II-4, IV-1, 7, VII-3, XII-2, 6, 8, XIII-1, 2.
REK—IV-10, V-15, VII-22, XII-31, 32, 33, XIII-35, 37.
PEDT—I-6, III-21, IV-20, VI-3, VII-14, 17, 18.
PEDM—IV-14.
PELN—III-4.
PE All. Kos.—I-3.
MPE Nigliva—2.
MRE Rupnath—4.
MRE Sahasram—1, 5, 6.
MRE Bairat—2, 8.
MRE Maski—8.
MRE Brahmagiri—3, 9.
MRE Siddapur—14.
MRE Erragudi—3, 11.
MRE Rajula Mandagiri—3.
RE Erragudi—IV-8, V-3, XII-4.
MRE Gujjara—1.

(2) PEDT—VII-13, 16, 17, 22, 23.

(3) REG—VII-3 (in *Bāḍhaṃ*).

(4) RED—IV-1, 3, 5, 6, 7, V-4, VII-2.
REJ—IV-1, 5, 6, VII-2, VIII-2.
PEDT—VII-13, 19.
PELA—I-4, IV-10, VI-2.
PELN—I-4, IV-11, VI-2.
PER—I-3, III-3, IV-9.
MRE Rupnath—1, 2.

MRE Brahmagiri—2.
MRE Siddapur—5, 6, 15.
MRE Jatinga Rameshwar—4, 11.
MRE Gujjara—2.

(5) PEDT—VII-18, 22, 28, 29, 30.
PER—VI-2.
MRE Brahmagiri—7.
MRE Erragudi—5,

(6) REG—XII-9.
REK—VII-22 (in *Diḍhabhatita*), XII-35, XIII-36.
RE Bombay-Sopara—VIII-7.

(7) REK—IV-12.

APPENDIX No. 21

Ṇa

(1) REG—I-9, 11, 12, II-2, III-4, 5, IV-1, 2, 3, 6, 7, 8, 9, 10, V-1, 5, VI-9, 10, 11, VIII-3, 4, IX-5, 8, XI-2, 13, XII-3, 4, 5, 7, XIII-1, 3, 4, XIV-5.
SRED—II-10.
SREJ—I-7, II-3, 4.
Slab Ins. Bhabru—5.
MRE Brahmagiri—1, 5, 8, 9, 10, 11.
MRE Siddapur—1, 11, 15, 19.
MRE Jatinga Rameshwar—6, 17, 20.
MRE Gujjara—3, 4.

(2) REG—IV-2 (in *Samaṇa*), V-2.

(3) MRE Brahmagiri—5 (in *Sāvaṇe*).

(4) MRE Siddapur—2.

(5) REG—IV-3 (in *Caraṇena*).

APPENDIX No. 22

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(i) 𑀢 REG—II-1, IV-5 (in *Tārise*), VII-2 (in *Kāsānti*), 3, IX-3 (in *Tu*), XI-2, 4.

RED—I-1, 2, 3, 4, III-1, 2, 3, IV-1, 4, 5, 6, 7, 8, V-1, 2, 3, 4, 5, 6, 7, 8, VI-1, 2, 3, 4, 5, 6, VII-1, 2, VIII-1, 2, 3, IX-2, 3, 4, 5, 6, X-1, 2, 3, XIV-1, 2, 3.

SRED—I-1, 2, 5, 7, 8, 9, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, II-1, 2, 4, 5, 7, 8, 9, 10, 11.

REJ—I-1, 2, 4, 5, II-1, 2, 3, III-1, 2, 3, 4, IV-1, 3, 4, V-2, VI-2, 3, 4, 5, 6, 7, VII-1, 2, VIII-2, IX-1, 2, 4, 6, X-1, 2, 3, XIV-1, 2.

SREJ—I-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, II-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16.

RE Bombay-Sopara—VIII-6, IX-5, 6, 8, 9, 10.

PEDT—I-1, 2, 3, 6, 7, 8, 9, 10, II-11, 14, 15, 16, III-17, 18, 19, 22, IV-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, V-1, 2, 4, 6, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, 19, 20, VI-2, 3, 4, 5, 6, 7, 8, 9, 10, VII-11, 15, 19, 21, 22, 23, 26, 28, 29, 31.

PEDM—II-1, 3, 5, 6, 7, III-2, 3, 6, IV-2, 5, 6, 7, 8, 9, 10, 11, 12, 13, V-2, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, VI-1, 2.

PELA—I-1, 2, 4, 5, 6, II-1, 2, 3, 4, III-1, 2, 3, IV-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, V-1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, VI-1, 2, 3, 4, 5.

PBLN—I-1, 2, 4, 5, 6, 7, II-1, 2, 4, 5, III-1, 2, 3, 4, IV-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, V-1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, VI-1, 2, 3, 4, 5, 6.

PER—I-1, 2, 3, 4, 5, II-1, 2, 3, III-1, 2, 3, IV-1, 2, 3, 4, 5, 6, 7, 8, 9, V-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, VI-1, 2, 3, 4.

PE All. Kos.—I-1, 2, 3, 4, II-1, 2, 3, III-1, IV-1, 2, 3, 4, V-1, 2, 3, VI-2, 3.

MPE Queen's—1, 2, 4, 5.
MPE Kosambi—1, 3.
MPE Sanchi—3, 5, 6, 8.
MPE Sarnath—3, 8.
MPE Lumbini—1, 2, 3, 4.
MPE Nigliva—2, 3, 4.
MRE Rupnath—1, 2, 3, 4, 5.
MRE Sahasram—1, 2, 6, 7, 8.
MRE Bairat—5.
Slab Ins. Bhabru—1, 2, 3, 4, 5, 6, 7, 8.
MRE Maski—3.

MRE Brahmagiri—1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13.

MRE Siddapur—1, 2, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21.

MRE Jatinga Rameshwar—4, 13, 14, 15, 16, 17, 20.

REK—I-3, 4, II-4, 5, III-7, 8, IV-9, 10, 11, 12, 13, V-14, 16, 17, VI-18, 19, 20, 21, VII-21, 22, VIII-22, 23, IX-24, 25, 26, X-27, 28, XI-29, 30, XII-31, 32, 33, 34, 35, XIII-36, 37, 38, South-face—6, 10, 13, 15, 17, XIV-20, 22.

RE Erragudi—I-3, 6, IV-2, 6, VIII-2, 5, IX, 5, X-2, 3, XI-4, XII-2, 10, XIII-2, 33.

MRE Gujjara—1, 2, 3, 4, 5.

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REG—I-3, 4, 5, 6, 9, 10, 12, II-1, 2, 3, 4, 6, 7, 8, III-1, 2, 3, 4, 5, 6, IV-1, 2, 4, 5, 6, 7, 9, 10, 11, 12, V-1, 2, 3, 4, 5, 6, 7, 8, VI-1, 2, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, VII-1, 2, 3, VIII-1, 2, 3, 5, IX-3, 4, 5, 6, 7, 8, 9, X-1, 2, 3, 4, XI-1, 2, 3, 4, XII-1, 2, 3, 4, 5, 6, 7, 8, 9, XIII-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, XIV-2, 3, 4, 5.

RED—I-1, II-1, 3, 4, III—2, 3, IV-1, 3, 5, 7, 8, V-2, 3, 4, 6, 7, 8, VI-2, 3, 4, 5, 6, 7, IX-1, 2, 5, X-1, 3, XIV-2, 3.

SRED—I-9, 10, 11, 12, 13, 14, 15, 18, 21, 23, 25, 26.

REJ—I-1, 3, II-3, III-2, 4, IV-1, 5, VI-1, 3, 4, 5, 6, 7, VII-1, VIII-1, 2, 3, IX-3, 6, X-2, 3, XIV-1, 2.

SREJ—I-6, 11, II-2.

RE Bombay-Sopara—VIII-9.

PEDT—II-16, IV-18 (in *Dāhanti*), VII-14, 15, 19, 21, 22, 23, 24, 25, 26, 27, 29, 30, 31, 32.

PELA—VI-3 (in *Nāti*).

PER—V-4.

MPE Queen's—1.

MPE Kosambi—4, (in *Sandhāpayitu*).

MPE Sarnath—4, 5, 6, 7, 8, 9, 10.

MRE Rupnath—4, 5, 6.

MRE Sahasram—3, 4, 5, 8.

MRE Bairat—1, 6, 7.

MRE Maski—4, 5, 6, 7, 8.

Cave Ins. Barabar—I-1, II-2, 3, III-3.

REK—I-1, 2, 3, 4, II-4, 5, 6, III-7, 8, IV-9, 10, 11, 12, V-13, 14, 15, 16, 17, VI-17, 19, 20, VII-21, 22, VIII-22, 23, IX-25, 26, 27, X-27, 28, XI-29, 30, XII-31, 32, 33, 34, 35, XIII-35, 36, 37, 38, 39, South-face-6, 7, 9, 10, 13, 16, 17, 18, XIV-19, 20, 21, 22, 23.

RE Erragudi—III-1, IV-8, V-1, 2, 3, 6, 7, VI-3, 4, VII-1, 3, 4, 5, VIII-2, IX-5, 7, X-1, 2, XI-2, 3, XII-1, 5, 10, XIII-12, 30, 2nd. 1, 3, 6.

(3) SRED—I-1, 3, 4, 7, 8, II-1, 2, 4, 5, 6, 7, 8, 9, 10, 11.

MRE Brahmagiri—2 (in *Tu*).

MRE Siddapur—3, 17.

REK—III-7 (in *Ánapayite*), VI-19 (in *Anataliyenā*).

MRE Gujjar—5.

(4) REG—XII-4 (in *Pavaḍhayati*), 5.

PEDT—I-12.

(5) SRED—II-8 (in *Desāvutike*).

(6) REG—II-6, III-2, IV-6, V-2 (in *Potā*), VI-9, VII-2, X-3 (in *Tu*), XI-2, XIII-1, 2, XIII-4, 5, XIV-2, Below REG-XIII.

SRED—I-14 (in *Dekhata*).

REK—I-3, II-4, 6, III-7, 8, IV-9, 10, 12, 13, V-13, 14, 15, 16, VI-17, 18, 19, 20, VIII-23, IX-24, 25, 26, 27, X-27, 28, XI-29, 30, XII-31, 32, 33, 34, XIII-35, 36, 37, 38, 39, South-face—7, 8, 9, 13, 14, 15, XIV-22.

(7) REG—IV-5, 11, V-2, 3, 4, VI-7, VIII-1, IX-1, 2, 3, 4, 5, X-4, XI-2, 4, XII-3, 4, 6, 9, XIII-1, 3, 6, 10, XIV-1.

REJ—VI-2, 7.

SREJ—I-1, 12, II-9.

RED—I-2, II-2, IV-3 (in *Huta*).

SRED—I-17 (in *Tisa*).

PEDT—VII-11, 16, 18.

MPE Sarnath—9.

MRE Sahasram—5.

REK—I-1, 2, III-7, 8, IV-11, V-15, 16, 17, XI-29, XII-34, XIII-35, South-face-11, 14, 16.

MRE Gujjara—2 (in *Ti*).

(8) SRED—II-10 (in *Likhite*).

SREJ—I-8 (in *Hoti*), II-10 (in first *Anukampati*).

PELA—V-4 (in *Catupade*).

(9) REJ—VI-2 (in *Ante*).

SREJ—I-5 (in *Ichitaye*), II-10 (in *Ti*).

(10) SREJ—I-2, 10 (in *Mahāmātā*), II-15 (in *Antalā*).

MPE Sanchi—3 (in *Ti*.)

MRE Brahmagiri—4 (in *Tu*).

REK—VI-18, VIII-23 (in *Tadopayā*), IX-27 (in *Palata*), X-27 (in *Anatā*), XII-33 (in *Kitti*), XIII-35.

MRE Erragudi—2, 3, 4, 5, 8, 9, 13, 15, 17, 18, 19, 22, 23, 24, 25, 26.

MRE Rajula Mandagiri—1, 2, 3, 5, 6, 8, 9, 10, 12, 13, 15.

RE Erragudi—VII-2, 3, XII-11, XIII-2nd-5.

APPENDIX No. 23

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(1) ⊙ REG—I-11, II-8, IV-7, 10, 11, V-7, VI-4, 5, 7, 10, 12, IX-6, 9, X-1, XI-4, XII-2, 6, 8, 9, XIII-10, XIV-4.

REK—IV-10, 12, 13, V-14, 15, 17, VI-19, VII-21, VIII-22, 23, IX-24, 25, X-27, XI-29, 30, XII-31, 32, 33, 34, XIII-36, 37, 38, 39, South-face-10, 12, XIV-19, 20, 21, 22.

RED—II-3, III-2, IV-2, 3, V-4, 7, VI-4, 5, VII-2, IX-1, 2, 5, XIV-1, 2, 3.

SRED—I-4, 5, 6, 14, 17, 19, 23, 26, II-3, 7, 8, 9, 11.

REJ—II-1, 3, III-2, IV-4, V-4, VI-4, 5, XIV-1, 2.

SREJ—I-2, 3, 4, 7, 9, 12, II-2, 10, 12, 14, 16.

RE Bombay-Sopara—VIII-8, IX-6.

PEDT—I-5, II-16, III-20, IV-4, 10, 11, 13, V-2, 13, VI-4, 6, VII-12, 14, 15, 17, 20, 22, 25, 30, 31, 32.

PEDM—III-4, IV-6, V-6.

PELA—I-3, II-4, III-2, IV-5, 6, V-2, 8, VI-3.

PELN—I-4, II-4, III-3, IV-2, 6, 7, V-9 VI-3, 4.

PER—I-3, II-3, III-2, IV-2, 5, 6, V-1, 7, VI-2.

PE All. Kos.—I-2, V-1, VI-2.

MPE Sarnath—7, 8, 10.

MPE Sanchi—8.

MPE Lumbini—3.

MPE Nigliva—2.

MRE Rupnath—4.

MRE Sahasram—6, 7, 8.

Slab Ins. Bhabru—5.

MRE Siddapur—11, 20, 21.

MRE Jatinga Rameshwar—12.

Cave Ins. Barabar—III-3.

MRE Rajula Mandagiri—7.
RE Erragudi—I-3, V-2, 3, 7, VI-1, VII-4, IX-9, X-1, XI-1, 4, 5, XII-2, 6, 10, XIII-6, 17,31, XIV-2, 4, 7.
MRE Gujjara—4, 5.

(2) REG—I-9.
SRED—I-26.
SREJ—I-6, II-13.

(3) REK—XIII-38.
SRED—I-15, 22.
REJ—I-2, II-3.
PEDM—II-6.

(4) REG—VIII-3, XII-5.
REK—II-5, IX-26, XII-29.

(5) MPE Sarnath—11.

(6) REG—V-9, XIV—4.
REK—IV-12, XII-31, 34.
RED—V-5.
SRED—I-11.
PEDT—VII-22 (in *Paliyovadātha*), 24.
PELA—IV-2.
PELN—V-2.
MRE Sahasram—8.

(7) SREJ—I-9 (*Ālādhayisatha*).

APPENDIX No. 24

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REG—I-6, 8, 10, II-1, 4, III-1, 2, IV-2, 4, 5, 7, 8, 9, 11, 12, V-1, 4, VI-2, 4, 5, 6, 8, VII-1, 3, VIII-2, 3, 4, 5, IX-1, 3, 4, 5, 6, 7, 8, X-1, 2, 3, 4, XI-1, 2, 3, 4, XII-1, 2, 3, 5, 7, 8, 9. XIII-2, 6, 7, 9, XIV-1, 5.

REK—I-2, II-4, III-8, IV-10, 11, 13, VII-21, VIII-22, 23, IX-27, X-27, 28, XI-29, 30, XII-30, 32, 33, 34, 35, XIII-35, 36, 37, 38, 39, South-face—4, 5, 8, 9, 10, 11, 17, XIV-19, 23.

RED—I-1, 2, 3, II-1, 2, III-1, IV-2, 3, 5, 8, V-1, 2, 3, 6, 7, VI-1, 2, 3, 4, 7, VII-1, 2, VIII-1, 2, 3, IX-1, 2, 3, 5, 6, X-1, 2, 4, XIV-1.

SRED—I-2, 3, 5, 7, 9, 13, 14, 15, 16, 19, 24, 25, II-1, 2, 3, 5, 6, 7, 8, 9, 11.

REJ—I-1, 2, 3, 4, II-1, 2, 4, III-1, 3, IV-2, 3, 6, V-1, 3, VI-1, 2, 3, 4, 6, 7, VII-1, VIII-1, 2, 3, 4, IX-1, 2, 5, X-1, 2, 3.

SREJ—I-1, 2, 4, 7, II-1, 2, 4, 7, 8, 12, 14.

PEDT—VII-11, 14, 19, 26, 28.

PEDM—II-1, 3, 4, III-1, 2.

PELA—I-1, 2, 5, II-1, 2, 3, III-1, 2, IV-1, 2, 3, 4, 6, 7, 8, 9, 10, V-1, 2, 3, 4, 5, 6, 8, 9, 10, 11, VI-1, 3.

PELN—I-1, 2, 5, II-1, 2, III-1, 2, 4, IV-1, 2, 3, 4, 5, 7, 8, 9, 10, V-1, 3, 5, 7, 9, 10, 11, 12, VI-1.

PER—I-1, 2, 4, II-1, 2, 3, III-1, 3, IV-1, 2, 3, 4, 6, 7, 8, 9, V-1, 2, 4, 6, 7, 8, 9, VI-1.

PE All. Kos.—I-1, 3, 4, II-1, 2, III-1, IV-2, 3, 4, V-1, 2, 3, VI-1, 2.

MPE Sanchi—5, 6.
MPE Sarnath—1.
MPE Lumbini—1, 2, 4.
MPE Nigliva—1, 2.
MRE Rupnath—2, 3.
MRE Sahasram—1, 2, 3, 4, 6.
MRE-Bairat—8.
Slab Ins. Bhabru—1, 2, 3, 6.
MRE Maski—8.
MRE Brahmagiri—1, 2, 4, 7, 8, 9.
MRE Siddapur—8.
MRE Jatinga Rameshwar—2, 20.
MRE Erragudi—1, 9, 18, 19.
Cave Ins. Barabar—II-1, III-1.
MRE Rajula Mandagiri—1, 4, 7, 8, 9.
RE Erragudi—I-4, IV-3, 10, VII-1, VIII-1, 2, 3, 4, 5, IX-1, X-1, 3, 4, XI-1, 5, XII-1, 2, 10, 31, XIII-2nd side-2, 6.
MRE Gujjara—1, 2, 3.
RE Bombay-Sopara—1, 3, 5, 10.

(2) REG—III-1, IV-3, XIII-5, 9.
REK—III-37 (in *Dāśabhaṭakasi*).
RED—III-1.
REJ—I-I, VI-3, VIII-2.
REJ—I-1.
MRE Brahmagiri—3.
MRE Erragudi—11, 13b.

(3) REK—I-1, 2, II-5, III-6, 7, IV-9, 10, 11, 13, V-14, 15, 16, VI-17, 18, 20, 21, VIII-22, 23, IX-24, 26, XII-31.
MPE Kosambi—4.

(4) PELA—III-3 (in *Hidata*).

(5) REG—I-1, 2, 4, 5, 8, IV-3, 4, 5, VIII-2, 3, X-2, 3, XI-2, 4, XIII-9, XIV-5.
REK—II-6, IX-25, XII-39, XIII-South-face-17.
SRED—II-6.
PELN—IV-8 (in *Daṇḍe*).
PER—III-2 (in *Dupaṭivekhe*).
MRE Rupanath-2 (in *Dāni*).
MRE Bairat—1.
MRE Siddapur—9, 12, 19.

(6) REG—I-7, 8, IV-2, VI-7, 14, VII-2, X-3, XII-6, XIII-7.
REK—I-3, 4, II-5, IV-9, VII-21, XI-30.
SRED—II-4, (in *Devānaṃ*).
SREJ—I-5, II-1.

(7) REG—II-4 (in *Dve*), III-1, V-3, XII-8.
REK—II-4, 5, III-7, XI-29, XII-34, XIII-35, South-face-14.
RED—VIII-1, 3.
REJ—IV-3, V-1, IX-5.
SREJ—1-8.
RE Bombay-Sopara—VIII-9, IX-8.
PEDT—I-1, 3, 8, II-10, 12, 13, 14, III-17, 18, 19, 21, 22, IV-1, 4, 5, 6, 7, 9, 12, 13, 14, 15, 16, 18, 20, V-1, 3, 4, 7, 10, 12, 13, 15, 16, VI-16, VII-22, 23, 24, 25, 26, 27, 28, 29, 31.
PEDM—II-1, 2, 3, 6, IV-9, 10, 11, 15, V-3, 5, 6, 7, 9, 10.
PELN—II-3.
PER—II-1, III-2, 3, IV-3, 8, VI-3.
PE All. Kos.—II-1, III-1, IV-2, 3.
MPE Queen's—2, 3, 4, 5.
MRE Rupnath—1.
MRE Bairat—4.
MRE Maski—5.

MRE Erragudi—7, 13, 16, 25a.
MRE Gujjara—4.
RE Erragudi—V-1, VII-3, XI-2, XIII-2nd-5.
Cave Ins. Barabar—I-1.

(8) REK—I-2, V-13, IX-24, 25.
MRE Erragudi—5a.

(9) REG—III-1 (in *Idaṃ*)

(10) REK—X-27 (in *Devānaṃ*).

(11) MPE Queen's—1, 2 (in *Dāne*).

(12) MPE Sarnath—4, 6, 7.
RED—VI-1 (in *Devānaṃ*).

APPENDIX No. 25

Dha

(1) D

REG—I-1, 2, 10, 12, III-4, 5, IV-3, 5, 7, 8, 9, 10, 11, V-4, 5, 6, 8, 9, VI-3, 12, VII-1, VIII-2, 3, 4, IX-1, 4, 5, 6, 7, 9, X-2, XI-1, 3, 4, XII-1, 2, 9, XIII-1, 2, 8, 9, 10, XIV-4, 6.

RED—I-2, 4, II-2, III-2, 3, IV-2, 3, 4, 5, 6, 7, 8, V-3, 4, 5, 6, 7, 8, VI-2, VII-1, 2, VIII-2, 3, IX-1, 2, 4, 5, 6, 7, X-2.

SRED—I-8, 9, 17, II-10.

REJ—I-2, 4, II, 3, III-3, IV-2, 4, 5, 7, V-4, VI-2, 6, VII-1, VIII-3, IX-4, 5, 6, X-1, XIV-2.

RE Bombay-Sopara—VIII-7, IX-3, 5, 7.

REK—I-3, II-5, III-7, 8, IV-9, 10, 11, 12, 13, V-15, 16, VI-18, 20, VII-21, 22, 23, IX-24, 25, 26, 27, X-27, XI-29, 30, XII-31, 33, 34, 35, XIII-35, 36, 37, South-face-5, 10, 11, 12, 13, 15, 17, XIV-22.

PEDT—I-2, 3, 6, 7, 9, 10, II-11, 12, 13, 15, III-20, IV-6, 8, 10, 11, 16, 19, 20, V 2, 8, 12, 13, 20, VI 2, 3, 8, 10, VII-13, 19, 20, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32.

PEDM—I-1, II-1, 3, 5, III-4, 13, 14, V-6, 15, VI-2.

PELA—I-1, 2, 3, 5, 6, II-1, 2, 3, III-3, IV-1, 3, 4, 5, 7, 8, 9, 10, V-1, 6, 8, 13, VI-1, 2, 4, 5.

PELN—I-2, 4, 5, 6, 7, II-1, 2, 3, 4, III-3, IV-1, 4, 5, 6, 9, 11, V-6, 7, 9, 15, VI-1, 2, 5.

PER—I-1, 2, 3, 4, 5, II-1, 2, IV-1, 3, 4, 5, 7, 9, V-1, 5, 7, 11, VI-2, 3, 4.

PE All. Kos.—I-1, 2 3, 4, II-1, 2, 3, IV-2, 4, V-1, 3.

MPE Sarnath—4, 8.

MPE Lumbini—2.

MPE Nigliva—2.

MRE Rupnath—3, 4.
MRE Sahasram—6.
MRE Bairat—6.
Slab Ins. Bhabru—1, 2, 3, 4, 6, 7.
MRE Brahmagiri—2, 5, 6, 10.
MRE Siddapur—4, 10, 17.
RE Erragudi—I-3, 5, IV-10, V-3, 4, 5, 6, VI-3, VII-2, 4, VIII-4, IX-2, X-2, XI-2, 4, XIII-5, 28, 2nd side, 3.

(2) REG—III-3, VI-12, VIII-4, X-2, XI-1, 3, XII-6, 9, XIII-1.
RED—V-4 (in *Gandhālesu*), 7.
SRED—I-20.
PEDT—IV-19, VII-23, 28, 29.
PEDM—IV-9, 10, V-6.
PELA—I-4.
REK—I-4, IV-10, V-15, 16.

(3) REG—I-6, III-5, IV-4, VI-13, IX-3, 7.
RED—VI-6.
PEDT—IV-2, 16.
PEDM—I-2.
PELA—I-5 (in *Vidhi*), II-1 (in *Dhamayutena*), 9 (in *Vadhana*).
PER—VI-1.

(4) REG—VII-3, IX-8.
SRED—I-15.
REJ—III-3.

(5) REG—XI-1 (in *Sambadho*), 2.
MRE Maski—2.
or PELN—IV-9 (in *Vadhānm*), V-2.
PER—III-3.
MPE Kosambi—4.
REK—IV-12 (in *Vadhi*), V-14, VIII-22, IX-24, XII-34.

(6) REG—XIV-1.

(7) MRE Erragudi—7.

(8) REK—XIV-9.

(9) SRED—II-6, 9.
SREJ—I-4, 5, 8, II-7, 9, 11, 13, 15.
PEDT—VII-13, 16, 17 18, 22.
MRE Rupnath—4.
MRE Maski—5, 6.
MRE Erragudi—9.
MRE Gujjara—1, 3, 4, 5.

(10) MRE Erragudi—19.

APPENDIX No. 26

Na

(1) ⊥ REG—I-1, 2, 3, 5, 6, 7, 8, 9, 12, II-1, 3, 4, 5, 6, 7, 8, III-1, 2, 3, 4, 5, 6, VI-1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, V-1, 2, 4, 5, 6, 8, VI-2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, VII-3, VIII-1, 2, 3, 4, 5, IX-1, 2, 3, 4, 5, 6, 7, 9, X-1, 2, 3, 4, XI-1, 2, 3, 4, XII-1, 2, 3, 4, 6, 7, 8, 9, XIII-1, 2, 4, 5, 6, 7, 8, 9, 10, XIV-1, 2, 4, 6.

REK—I-1, 2, 3, 4, II-4, 5, 6, III-7, 8, IV-9, 10, 11, 12, 13, V-13, 14, 15, 16, 17, VI-17, 18, 19, 20, 21, VII-21, 22, VIII-22, 23, IX-24, 25, 26, 27, X-27, 28, XI-29, 30, XII-30, 31, 32, 33, 34, XIII-35, 36, 37, 38, 39, South-face-4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, XIV-19, 20, 21, 22, 23.

RED—I-1, 3, II-1, 2, 3, 4, III-1, 2, 3, IV-1, 2, 3, 4, 5, 6, 7, 8, V-1, 2, 3, 4, 5, 6, 7, 8, VI-1, 2, 3, 4, 5, 6, 7, VII-1, 2, VIII-1, 2, 3, IX-1, 2, 4, 5, 6, X-1, 2, 4, XIV-1, 3.

SRED—I-1, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, II-1, 3, 4, 5, 6, 7, 8, 9, 10.

REJ—I-1, 2, 3, 4, II-1, 2, 3, 4, III-1, 2, 3, 4, IV-1, 2, 3, 4, 5, 6, 7, 8, V-1, 2, 4, 5, VI-1, 2, 3, 4, 5, 6, 7, VII-1, 2, VIII-1, 2, 3, 4, IX-1, 2, 3, 4, 5, 6, X-1, 2, 3, XIV-1, 2.

SREJ—I-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, II-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16.

RE Bombay-Sopara—VIII-5, 6, 7, 8, IX-1, 2, 4, 6, 10.

PEDT—I-1, 2, 3, 4, 5, 6, 9, 10, 11, II-11, 12, 13, 14, 15, III-17, 18, 19, 20, 21, 22, IV-1, 2, 3, 5, 6, 7, 8, 9, 10, 12, 13, 16, 17, 18, 19, 20, V-1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, VI-1, 2, 5, 6, 7, 8, 9, VII-11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32.

PEDM—I-1, II-1, 2, 3, 4, 6, III-1, 2, 3, 4, 5, IV-5, 7, 9, 10, 11, 12, 13, 14, V-2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, VI-1.

PELA—I-2, 3, 4, 5, II-1, 2, 3, 4, III-1, 2, 3, IV-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, V-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, VI-1, 3, 4, 5.

PELN—I-2, 3, 4, 5, 6, 7, II-1, 2, 3, 4, III-1, 2, 3, 4, IV-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, V-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, VI-1, 3, 4, 5, 6.

PER—I-1, 2, 3, 4, 5, II-1, 2, 3, III-1, 2, 3, IV-1, 2, 3, 4, 5, 6, 7, 8, 9, V-1, 2, 4, 5, 6, 7, 8, 9, 10, 11, VI-1, 2, 3, 4.

PE All. Kos.—I-1, 2, 3, 4, II-1, 2, 3, III-1, IV-2, 3, 4, V-1, 2, 3, 4, 6, 8, VI-2, 3.

MPE Queen's—1, 2, 3, 4.

MPE Kosambi—1, 2, 4.

MPE Sanchi—3, 6.

MPE Sarnath—3, 4, 5, 6, 8, 9, 10, 11.

MPE Lumbini—1, 2, 4.

MPE Nigliva—1, 2, 3.

MRE Rajula Mandagiri—1, 3, 4, 6, 8, 9, 10, 11, 13.

MRE Gujjara—1, 2, 3, 4, 5.

MRE Rupnath—1, 2, 3, 4, 5.

MRE Sahasram—1, 2, 3, 4, 5, 6.
MRE Bairat—1, 2, 4, 5, 7.
Slab Ins. Bhabru—1, 3, 4, 5, 6, 7, 8.
MRE Maski—1, 4, 5.
MRE Brahmagiri—1, 2, 3, 4, 6, 8, 10, 13.
MRE Siddapur—2, 4, 5, 6, 8, 9, 19.
MRE Jatinga Rameshwar—15, 21.
MRE Erragudi—1, 4, 5, 7, 9, 10, 12, 13b, 15, 16, 18, 19, 21, 22, 23, 24, 25.
Cave Ins. Barabar—I-1, II-1, 2, III-1.
RE Erragudi—I-4, 6, II-1, 2, 3, III-1, IV-2, 3, 4, 5, 7, 8, 10, V-3, 4, 6, 7, VI-1, 9, VII-1, 3, 4, VIII-4, 5, IX-3, X-1, 2, 3, 4, XI-1, 3, 4, XII-1, 2, 3, 8, 10, XIII-1, 2, 7, 13, 14, 17, 2nd side-4, 6, XIV-1, 2.

(2) REG—V-6 (in *Badhana*), VII-1.
REK—II-6.
PEDT—II-10, 14 (in *Kayānā*), IV-6 (in *Dhamayutena*).
PEDM—III-2 (in *Mina*).
PELA—I-1, (in *Devānaṃ*), IV-7 (in *Vadhānaṃ*), 8 (in *Tānaṃ*), V-1 (in *Devānaṃ*), 5 (in *Nani*), 6 (in *No*).
PELN—I-1, (in *Devānaṃ*), VI-3, (in *Nātisu*).
PER—II-1, (in *Kayāne*), III-2, (in *Imāni*), V-3, 10.
MPE Nigliva—1 (in *Lajine*), 2.

(3) RED—VI-2 (in *Janasa*).
PEDM—II-5.

(4) REG—II-8, IX-8.
REK—VII-21 (in *Devānaṃ*).

(5) REG—IV-7, VIII-1, IX-8, X-1 (in *Devānaṃ*), XI-4.
REK—II-5 (in *Ane*), IV-9 (in *Dasine*), XIII-35, 39.
SRED—II-7 (in *Devānaṃ*).

PEDT—VII-25.
PELA—IV-1 (in *Tena*), 4.
PELN—V-6 (in *Ajaka nā*).
MRE Erragudi—22 (in *Apaoāyanā*).

(6) ┴ REG—II-7, IV-12 (in *Bhisitena*).
REK—X-27, XII-32, (in *Chanati*), 33 (in *Manaiā*).
SRED—II-6 (in *Etakena*), 10 (in *Khanasi*).
PEDT—IV-6.
PEDM—IV-12 (in *Ni*)
PELA—IV-6 (in *Kanaṃ*).
MRE Rupnath—2 (in *No*).

(7) REG—IV-3 (in *Caranena*), VI-4 (in *Uyānesu*), VIII-3 (in *Samannāaṃ*), XII-9 (in *Dipanā*).
REK—IV-9 (in *Calanevā*), 13 (in *Hini*), XIII-35 (in *Devānaṃ*).
PEDT—VII-30 (in *Munisā*).
PELA—V-13 (in *Mokhani*).

(8) PER—V-11 (in *Lakhane*).

(9) REG—V-2, (in *Anuvatisare*), XII-1 (in *Dānena*).
REJ—VI-2 (in *Janasa*).
PELA—V-9 (in *Kayāni*).

(10) REG—II-6, III-6, IV-9, (in *Bahuni*), V-15 (in *Yona*). IX-24 (in *Nilathiyā*), XIII-37, 38 (in *Nathi*).
PELA—III-1 (in *Devānaṃ*).
PER—1-2 (in *Aṃnata*), II-2 (in *Dine*), IV-3 (in *Gahinevu*)
MPE Queen's—4 (in *Ni*).

(11) MRE Rajula Mandagiri—8.

APPENDIX No. 27

Pa

(1) REG—I-1, 2, 3, 8, 9, 10, 11, 12, II-1, 2, 3, 6, 7, 8, III-1, 2, 4, 5, IV-2, 4, 6, 8, 11, 12, V-1, 2, 3, 4, 6, 7, 8, 9, VI-2, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, VII-1, 3, VIII-2, 4, 5, IX-1, 2, 3, 5, 6, 8, X-1, 2, 3, 4, XI-1, 2, 3,4, XII-1, 2, 3, 4, 5, 6, 7, 8, 9, XIII-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, XIV-1, 3, 4, 6, below REG-XIII-2.

REK—I-1, 2, 3, 4, II-4, 5, 6, III-6, 7, 8, IV-9, 10, 11, 12, V-13, 14, 15, 16, VI-17, 18, 20, 20, 21, VII-21, VIII-22, 23, IX-24, 25, 26, X-27, 28, XI-29, 30, XII-31, 32, 33, 34, 35, XIII-35, 36, 37, 38, 39, South-face-5, 8, 11, 13, 14, 15, 17, XIV-19, 21, 22.

RED—I-1, 3, 4, II-1, 2, 3, 4, III-1, 2, 3, IV-1, 2, 3, 4, 5, 6, 8, V-1, 2, 3, 4, 5, 6, 7, 8, VI-1, 2, 3, 4, 5, 6, VII-1, VIII-1, 2, 3, IX—1, 3, 6, X-1, 2, 3, XIV-1, 3.

SRED—I-4, 6, 7, 8, 10, 14, 15, 16, 17, 18, 19, 20, 21, 25, II-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11.

REJ—I-1, 2, 3, 4, 5, II-1, 2, 3, 4, III-1, 2, IV-1, 2, 3, 4, 6, 7, V-1, 2, VI-1, 2, 3, 4, 5, 6, 7, VII-1, 2, VIII-1, 3, 4, IX-1, 3, 4, X-2, XIV-2.

SREJ—I-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, II-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16.

RE Bombay-Sopara—VIII-7, IX-1, 3, 9, 10, 11.

PEDT—I-1, 2, 3, 4, 6, 7, 8, 9, II-10, 11, 12, 13, 14, 15, 16, III-17, 18, 19, 21, 22, IV-1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, V-1, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, VI-1, 2, 3, 4, 5, 7, 8, 10, VII-11, 19, 21, 22, 23, 24, 25, 26, 28.

PEDM—II-1, 2, 3, 4, 5, 6, III-1, 2, 3, 5, 6, IV-7, 11, 12, 13, V-4, 5, 6, 8, 9, 12, 13, 15, VI-1, 2.

PELA—I-1, 2, 3, 4, 5, II-1, 2, IV-2, 3, 4, 5, 6, 7, 8, 9, V-1, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, VI-1, 2, 3, 4, 5.

PELN—I-1, 2, 3, 4, 5, 6, II-1, 2, 3, 4, 5, III-1, 2, 4, IV-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, V-1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, VI-1, 2, 3, 4, 5.

PER—I-1, 2, 3, 4, 5, II-1, 2, 3, III-1, 2, 3, IV-1, 2, 3, 4, 5, 6, 7, 8, 9, V-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, VI-1, 2, 3, 4.

PE All. Kos.—I-1, 2, 3, 4, II-1, 2, 3, III-1, IV-1, 2, 3, 4, V-1, 2, 3, VI-1, 2, 3.

MPE Queen's—1.

MPE Kosambi—1, 4.

MPE Sanchi—3.

MPE Sarnath—3, 4, 5, 6, 7, 8.

MPE Lumbini—1, 3.

MPE Nigliva—1, 4.

MRE Rupnath—1, 2, 3, 4.

MRE Sahasram—1, 2, 4, 5, 6, 7, 8.

MRE Bairat—1, 2, 3, 7.

Slab, Ins. Bhabru—1, 2, 4, 5, 6, 7, 8.

MRE Maski—1, 3, 5.

MRE Brahmagiri—1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13.

MRE Siddapur—1, 3, 5, 6, 7, 8, 9, 10, 12, 13, 14, 18, 19, 20, 21.

MRE Jatinga Rameshwar—11, 13, 15, 17, 18, 20.

MRE Erragudi—2, 3, 5, 7, 8, 9, 11, 14, 15, 17 18, 19, 20, 22, 23, 24, 25, 25a.

Cave Ins. Barabar—I-1, II-1, 3, III-1, 4.

MRE Gujjara—1, 2, 3.

MRE Rajula Mandagiri—3, 6, 10, 13, 14, 15.

RE Erragudi—I-2, 4, 6, III-1, IV-2, V-1, 2, 5, 7, VI-1, 4, VII-1, 4, VIII-4, 5, X-1, 2, 3, 4, 5, XI-1, 3, 4, 11, XII-1, 10, XIII-1, 3, 7, 13, 2nd side-1, 2, 3.

(2) REG—I-5, 6, 7, 11, II-2, 5, 6, 7, 8, III-5, 6, IV-5, V-2, VI-13, IX-4, 6, X-1, 3, XI-2, 3, 4, XII-1, 3, 4, 9, XIII- 4, 6, XIV-1, 4.

REK—I-1, 3, II-4, 5, 6, III-7, 8, IV-9, 10, 11, 13, V-14, 15, VI-17, 19, 20, VIII-22, 23, IX-24, 25, 26, 27, X-28, XII-31, 32, XIII-36, 37, 38, South-face-5, 9, 10, 11, 13, 15, 18, XIV-21, 22, 23.

RED—IV-4, VII-3, IX-3.

SRED—I-5, 8, 12, 23, 26, II-6, 7, 8, 11.

REJ—V-1, VI-6, IX-3.

SREJ—I-1, 5, 8, II-5.

PEDT—VII-13, 14, 16, 17, 18, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31.

PEDM—I-2, 3, 4, III-1, 2, 3, IV-1, VI-6, 12.

PELN—II-4, V-5.

PE All. Kos.—II-2 (*Catupade*).

MPE Kosambi—3.

MPE Sanchi—3, 7.

MPE Sarnath—8, (in *Posathāye*).

MRE Siddapur—9.

MRE Erragudi—1.

MRE Rajula Mandagiri—1, 12.

RE Erragudi—IV-10, V-7, VII-4, IX-1, 7, X-3, XIII-2nd side-7.
MRE Gujjarā—4.
RE Bombay-Sopara—IX-7.

(3)
REG—III-6 (in *Devānampi...*).
REK—I-1, III-6, 7, IV-9, 11, V-13, XIII-30.
RED—II-2, III-1, V-2, 7, VI-3, 5, 7, VII-2, IX-4.
SRED—I-5.
REJ—I-3, II-4, V-3, IX-4.
PELA—VI-1 (in *Likhāpita*), 2 (in *Pativekhāmi*).
PELN—I-4 (in *Dhammapekha*), IV-5, VI-1.
PER—IV-4, 8, VI-2.
PE All. Kos.-II-3 (in *...pajantu*).
MRE Bairat—4, 6.
Slab Ins. Bhabru—1, 8.
MRE Erragudi—3, 19, 22.

(4)
PEDT—VII-26 (in *Devānampiye*), 31 (in *...pitā*).
MRE Erragudi—13.

APPENDIX No. 28

Pha

(1) REG—IX-3.
REK—XII-35.
RED—IX-3, 5.
SRED—I-3, 13, 18, II-2, 5, 6, 7, 8, 9, 11.
REJ—IX-3.
SREJ—1, 2, 3, 4, 5, 8, 11, II-2, 5, 8, 10.
PEDT—V-5.
PELA—V-3.
PELN—V-4.
PER—V-3.
PE All. Kos.—V-2.
MPE Sarnath—6, 9.
MRE Rupnath—2.
Slab Ins. Bhabru—1.
MRE Brahmagiri—4.
MRE Siddapur—8.
MRE Rajula Mandagiri—10, 11.
MRE Gujjara—3.
RE Bombay-Sopara—IX-7.

(2) REG—II-7, IX-4, XII-9.
REK—IX-25, XIII-South-face-14.
SREJ—II-11.
PEDT—VII-32.
RE Erragudi—IX-4, XIII-2nd side-2.
RE Bombay-Sopara—IX-7.

(3) REK—II 6.
MRE Erragudi—19.

APPENDIX No. 29

Ba

(1) □ REG—I-4, 8, II-2, III-4, IV-2, 4, 6, 7, V-2, 5, 6, 7, VIII-2, 3, IX-2, 3, 5, XI-1, 2, XII-2, 6, 7, 8, XIII- 1, 2, 9, XIV-3.

REK—II-4, III-8, IV-10, 11, 15, 16, XI-29, XII-31, 33, 34, XIII-35, 36, 37, 39 South-face-8, 9, XIV-21.

RED—III-3, IV-1, 3, 4, V-1, 4, 5, 6, VII-2, VIII-2, IX-1, 2, 4, XIV-2.

SRED—I-4, 8, 9, 20, II-8.

REJ—I-2, 3, III-3, IV-1, 3, 5, VII-2, IX-2, 4.

SREJ—I-2, 4, 5.

RE Bombay Sopara—VIII-6, IX-3, 4.

PEDT—II-11, 12, 14, III-21, IV-3, 16, V-4, 20, VII-22, 23, 24, 25, 27, 29, 30, 32.

PEDM—II-2, 3, 4, III-5, IV-9, V-15.

PELA—II-2, 3, III-3, IV-1, 7, V-3, 13.

PELN—II-2, 3, III-4, IV-2, 9, V-3, 15.

PER—II-1, 2, III-3, IV-1, 7, V-2, 11.

PE All. Kos. II-1, 2, IV-2, V-2.

MPE Queen's—3.

MPE Kosambi—1.

MPE Lumbini—2, 4.

MPE Nigliva—2.

MRE Rupnath – 1, 2.

MRE Sahasram—1, 2.

MRE Bairat—3, 4.

Slab Ins. Bhabru—1, 2, 6, 7.

MRE Brahmagiri—2, 3.

MRE Siddapur—5, 8.

MRE Jatinga Rameshwar—4.

MRE Erragudi—4, 21.

MRE Rajula Mandagiri—2.
MRE Gujjara—1, 2.
RE Erragudi—I-2, V-1, 5, VII-5, VIII-4, IX-3, XI-2.

(2) REG—VII-3; XIII-3.
REK—I-3, IV-9, 11; V-13, 15, VII-22, 23, IX-24.
MRE Maski—2, 3.

(3) REG—IX-3.
MRE Siddapur—6.

(4) REK—I-2, IX-25.

(5) REK—VII-22.

APPENDIX No. 30

Bha

(1) REG—I-3, 9, 11, II-8, III-1, 5, IV-1, 3, 5, 6, 12, V-4, 5, 7, VI-3, 11, VII-2, 3, VIII-2, 5, IX-2, 4, 6, XI-2, 3, 4, XII-3, XIII-4, 6.

REK—I-1, 3, 4, II-6, III-7, 8, IV-9, 10, 11, 13, V-14, 15, 16, VI-18, VII-21, 22, VIII-22, 23, IX-25, 26, XI-29, 30, XII-33, 34, XIII-35, 37, 38, 39, South-face-9.

RED—I-1, 3, 4, II-4, III-1, 3, IV-1, 2, 4, 8, V-3, 4, 5, 6, VI-2, 5, VII-1, 2, VIII-2, 3.

SRED—I-3, 22, II-2.

REJ—I-1, 2, 4, 5, III-1, 3, IV-1, 4, V-5, VI-2, VII-1, VIII-4, IX-3, 4.

SREJ—I-2.

RE Bombay-Sopara—VIII-10.

PEDT—I-2, III-21, IV-1, 3, 4, 12, 14, 20, V-2, 7, 8, 14, 19, VI-2, 9, VII-21, 24, 29, 30, 31.

PEDM—III-5, IV-5, V-7, 14.

PELA—I-1, 3, III-3, IV-1, 2, 6, 10, V-1, 5, 9, 13, VI-1, 5.

PELN—I-1, III-4, IV-1, 3, 7, 8, 11, V-1, 6-10, 14, VI-1, 6.

PER—I-1, 2, III-3, IV-1, 2, 6, 9, V-1, 4, 8, 11, VI-1, 4.

PE All. Kos.—I-1, 2, IV-4, V-1, 3.

MPE Kosambi—3.

MPE Sanchi—5.

MPE Sarnath—4, 5.

MPE Lumbini—3, 4, 5.

MPE Nigliva—3.

MRE Sahasram—8.

Slab Ins. Bhabru—1, 2, 3, 4, 5, 6, 7, 8.

MRE Maski—4, 7.
MRE Erragudi—5a, 21.
Cave Ins. Barabar—II-3.
RE Erragudi—II-6, III-1, V-5, VII-2, 4, VIII-5, XI-2, 3.

(2) REG—XII-6
REK—V-15 (in *Bambhāni*), VIII-23, XI-29.
RE Erragudi—V-4, XII-14, XIII-30.

(3) MPE Sarnath—3.

(4) REK—XI-29.
PLDT—VII-19, 25, 30 (in *Bhuye*), 31 (in *Vasābhisitena*).

REG—VII-3 (in *Didhabhatitā*), XI-1.
(5) REK—IV-10 (in *Anālambhe*).
PELN—IV-2, V-5.

(6) REG—I-12, IV-10, VI-2, VIII-5, XII-9, XIII-7.
PELN—I-3.
MRE Rupnath—5.
Cave Ins Barabar—I-2, II-2.
MPE Sanchi—3.

APPENDIX No. 31

Ma

(1) ४ REG—II-2.

REK—I-1, 2, 3, 4, II-5, 6, III-7, 8, IV-9, 10, 11, 12, V-13, 14, 15, 16, 17, VI-18, 19, 20, 21, VIII-22, 23, IX-24, 25, 26, X-27, 28, XI-29, 30, XII-31, 33, 34, 35, XIII-35, 36, 37, 38, 39, South-face-5, 6, 7, 10, 12, 13, 14, 15, 16, 17, 18, XIV-20, 21, 22, 23.

RED—I-2, 4, II-2, 4, III-1, 2, 3, 5, 6, 7, IV-2, 3, 4, 5, 6, 7, V-1, 2, 3, 4, 5, 6, 7, 8, VI-1, 2, 3, 4, 5, 6, 7, VII-1, 2, VIII-1, 2, 3, IX-1, 2, 3, 5, 6, X-2, XIV-2.

SRED—I-1, 2, 3, 4, 5, 6, 10, 13, 14, 15, 16, 21, 23, 24, 25, II-1, 4, 5, 6, 7, 8, 9, 10.

REJ—I-1, 2, 3, 4, II-1, 2, 3, 4, III-1, 2, 3, IV-2, 3, 5, 6, 7, 8, V-6, VI-1, 2, 3, 4, 5, 6, 7, VII-1, VIII-3, IX-2, 3 4, 5, 6, X-1, XIV-1, 2.

SREJ—I-1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, II-1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 14, 15.

RE Bombay-Sopara—VIII-5, IX-2, 4, 6, 8, 9, 11.

PEDT—I-2, 3, 5, 6, 7, 8, 9, 10, II-11, 13, 14, 15, III-17, 18, 19, 20, 21, 22, IV-2, 4, 5, 6, 8, 9, 11, 12, 13, 15, 16, 19, 20, V-2, 3, 4, 5, 6, 8, 9, 11, 13, 15, 16, 18, 19, 20, VI-2, 3, 4, 5, 6, 8, 9, 11, 13, 15, 16, 18, 19, 20, VI-2, 3, 4, 6, 7, 8, 9, 10, VII-13, 14, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32.

PEDM—I-1, II-1, 4, 5, III-2, 3, 4, 5, IV-6, 8, 10, 14, 15, V-4, 5, 6, 9, 10, 13, 14, 15, VI-1, 2.

PELA—I-1, 2, 3, 4, 5, 6, II-1, 2, 3, III-1, 2, 3, IV-1, 2, 3, 4, 6, 7, 8, 9, 10, V-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, VI-1, 2, 3, 4, 5.

PELN—I-1, 2, 3, 4, 5, 6, 7, II-1, 2, 3, 4, III-1, 2, 3, 4, IV-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, V-1, 3, 4, 5, 6, 7, 8, 9, 11, 13, 15, VI-1, 2, 3, 4, 5, 6.

PER—I-1, 2, 3, 4, 5, II-1, 2, 3, III-1, 2, 3, IV-1, 2, 3, 4, 5, 6, 7, 8, 9, V-2, 3, 4, 5, 6, 7, 8, 9, 10, 11, VI-1, 2, 3, 4.

PE All. Kos.—I-1, 2, 3, 4, II-1, 2, 3, III-1, IV-2, 4, V-1, 2, 3, VI-2, 3.

MPE Queen's—1, 3, 4.
MPE Kosambi—1, 2.
MPE Sanchi—4, 7, 8.
MPE Sarnath—7, 8, 9, 10.
MPE Nigliva—2, 3.
MRE Rupnath—1, 2, 3.
MRE Sahasram—1, 2, 3, 4, 5, 7.
MRE Bairat—3, 5.
Slab Ins. Bhabru—1, 2, 3, 4, 5, 6, 8.
MRE Maski—2, 4.
MRE Brahmagiri—1, 4, 6, 9, 10.
MRE Siddapur—1, 2, 7, 9, 13.
MRE Jatinga Rameshwar—16, 19, 20.
MRE Erragudi—3, 5, 9, 18, 19, 22.
Cave Ins. Barabar—III-3.
RE Erragudi—I-5, III-1, 2, IV-3, 10, V-1, 3, 6, 7, VIII-1, 2, 4, IX-3, 5, 7, X-1, 4, XI-2, 4, XII-13.
MRE Gujjara—1, 2, 3, 4, 5.

(2) PEDT—IV-8 (in *Me*).

(3) REK—V-15 (in *Dhamavadhiyā*), VI-20, IX-25, 27, X-27, XI-29, 30, XII-33, 34, XIII-35, 37, 39, South-face-8, 17, XIV-19, 20.

RED—IV-7 (in *Imasa*), V-4, 5, VI-3, 6, VIII-3, XIV-3.

SRED—I-5, 11, 24, II-2, 3, 5, 9.
SREJ—II-12.
PEDT—III-21 (in *Me*), 22, V-2, VII-21 22, 28, 30.
PELA—I-4.
PELN—I-6, III-3, 4, IV-8, 9, V-9, VI-5, 6.
PER—I-3, II-2, III-3, VI-3, 4.
PE All. Kos.—V-2, VI-2, 3.
MRE Maski—6.
MRE Siddapur—19.
MRE Erragudi—4, 5, 8, 9, 17.

(4) REG—II-1, 5, 7, III-4, IV-10, V-2, 4, 6, 9, VI-2, 13, IX-1, 3, 4, 5, XI-1, 4, XII-9, XIII-4, 5, 6, 7, 9, 10, XIV-4, 5.
REK—I-2, VII-22, VIII-23, IX-25, X-27.
RED—II-1, IV-1, 2, 4, V-7, VI-1, IX-4.
SRED—I-12, 20, 22, 25, II-5.
SREJ—I-5.
MRE Brahmagiri—3.
RE Erragudi—IV-5, 9, 12, V-1, 2, 3, VII-2, 4, IX-2, 4, 7, XI-2, 3, 4, XIII-10, 12, 2nd-2, 4.
RE Bombay-Sopara-IX-8.

(5) PEDT—VII-24 (in *Edathā Me*), 25 (in *Dhama*).
Slab Ins. Bhabru—4 (in *Imāni*).
MRE Brahmagiri—3, 4, 6, 9, 10.
MRE Siddapur—8.
RE Erragudi—I-3, 4, VIII-4, XIII-2nd-2, 3.

(6) REK—IX-26 (in *Maṅgale ukālakye*), XIII-38 (in *Ime*).
RED—VI-5.
SREJ—II-6 (in *Mate*).
PEDT—VI-13 (in *Dhamavaḍhiyā*).

(7) MRE Brahmagiri—3.
SRED—I-16 (in *Pajamine*).
MRE Gujjara—3 (Slightly apart in *Parakamasa*).

(8) MRE Brahmagiri—10 (in *Dhamo*).

(9) REG—II-3, 5, III-2, 3, 4, 5, IV-3, 6, 9, 10, V-2, 4, 8, VI-2, 4, 5, 6, 8, 9, 10, 11, 14, VII-1, VIII-4, IX-2, 3, 5, 6, 8, 9, X-3, 4, XI-1, 2, 3, XII-2, 4, 8, 9, XIII-1, 3, 5, 8, 11, XIV-2, 3, Below REG—XIII.
REK—I-4, III-7, IV-12, 13, V-17, VI-20, IX-25, 26, XIII- 39.
RED—IV-7.
SRED—I-12, 22.
SREJ—I-2, II-7.
PELA—I-4.
PELN—I-6.
MPE Queen's—1.
MRE Bairat—6.
MRE Siddapur—1, 12, 17.
MRE Rajula Mandagiri—3, 4, 6.

(10) REG—I-1, 4, 5, 6, 7, 10, 11, 12, II-8, III-1, 4, IV-2, 3, 5, 6, 7, 8, 9, 10, V-4, 5, 9, VI-3, 4, 6, 9, 10, 11, 12, 13, VIII-1, 3, IX-2, 4, 5, 7, 8, X-1, 2, XI-1, 2, XII-3, 4, 6, 7, 8, 9, XIII-1, 2, 3, 5, 6, 7, 8, 9, 10, XIV-1.

(11) REG—IX-5 (in *Dhama*), XII-9 (in *Mahā*......).

(12) REG—I-11 (in *Mago*), IV-11, VIII-4 (in *Dhamānusasti*).
RED—V-3.
PELA—I-5.

(13) REG—IX-3 (in 2nd *Maṅgala*), X-1.
RED—XIV-1.
SREJ—II-1.
PELA—I-3.
RE Erragudi—XIII-2nd-5.

(14) REG—III-2 (in the 2nd *Ma* of *Mama*), IV-10, X-8.

(15) REK—I-3, VI-17 (in *Athakame*).

APPENDIX No. 32

Ya

(1) ⅄ REG—I-1, 3, 5, II-2, 3, VI-6, 7, 13, XII-8, XIII-8.

REK—I-1, II-5, 7, III-8, 9, IV-11, 13, V-15, VI-18, 19, 20, IX-24, X-27, XIII-South-face-12, 16.

RED—I-3, 4, II-1, 2, 4, III-1, 2, 3, IV-2, 3, 5, 6, 7, 8, V-1, 2, 3, 4, 5, 6, 7, 8, VI-1, 2, 3, 4, 5, 6, 7, VII-1, 2, 3, IX-1, 2, 3, 5, 6, X-1, 2, XIV-1, 2.

REJ—I-1, 2, 3, 4, 5, II-1, 2, III-1, 2, 4, IV-2, 3, 4, 5, 8, V-1, 3, 6, VI-1, 2, 3, 4, 5, 6, 7, VII-1, VIII-1, 3, 4, IX-1, 2, 3, 4, 6, X-1, 2, XIV-1, 2.

SREJ—I-3, 6, 7, 8, 9, 10, II-1, 3, 4, 6, 7, 13, 14, 15.

RE Bombay-Sopara—VIII-6, IX-1, 3, 6, 8.

PEDT—I-1, 2, 3, 4, 5, 7, 8, 9, 10, II-10, 11, 12, 14, 15, 16, III-17, 18, 19, 20, 21, 22, IV-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20, V-1, 2, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, VI-1, 3, 4, 5, 7, 8, 9, 10, VII-11, 13, 16, 17, 18, 19, 20, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32.

PEDM—II-1, 2, 4, 5, 6, III-1, 2, 3, 4, 6, IV-4, 5, 6, 7, 8, 11, 14, 15, V-2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, VI-1, 2.

PELA—I-1, 2, 3, 5, II-1, 2, 3, 4, III-1, 2, 3, IV-1, 2, 3, 4, 5, 6, 7, 8, 9, V-5, 6, 7, 8, 9, 10, 11, 12, 13, VI-3, 4.

PELN—I-1, 2, 3, 4, 5, 6, II-1, 2, 3, 4, 5, III-1, 2, 4, IV-1, 2, 3, 4, 5, 6, 7, 8, 9, 11, V-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, VI-1, 2, 3, 4, 5, 6.

PER—I-1, 2, 3, 4, 5, II-1, 2, 3, III-1, 2, 3, IV-1, 2, 3, 4, 5, 6, 7, 8, 9, V-1, 3, 4, 5, 6, 7, 8, 9, 10, 11, VI-1, 2, 3, 4.

PE All. Kos.—I-1, 2, 3, 4, II-1, 2, 3, III-1, IV-1, 2, 3, 4, V-1, 2, 3, 8, VI-1, 2, 3.

MPE Kosambi—2, 4.

MPE Lumbini—1, 2, 5.

MPE Nigliva—1, 3.

MRE Rupnath—1, 3.

Slab Ins. Bhabru – 1, 3.

MRE Maski—6, 8.

Cave Ins. Barabar—II-2.

MRE Erragudi— 21 (in *Yugya*).

MRE Rajula Mandagiri—4.

MRE Gujjara—1, 2, 3, 4, 5.

RE Erragudi—IV-7, 10, V-3, 4, 5, 6, VI-1, VIII-5, IX-6, XI-3, XIII-1.

(2) RED—IV-3, V-5, 7.
PEDT—VII-11, 13, 14, 17, 19, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31.

(3) PEDT—VII-11.
PELA—I-2.
PELN—I-1.

(4) MRE Brahmagiri—5 (in *Iyam*).
MRE Siddapur—16.

(5) PELN—V-2.

(6) ⊥ REG—I-1, 2, 4, 7, 8, 10, 11, II-1, 3, 4, 6, 7, 8, III—1, 2, 3, 4, 5, 6, IV-2, 4, 5, 7, 8, 9, 11, 12, V-1, 2, 3, 4, 5, 6, 7, 8, 9, VI-2, 4, 6, 7, 8, 9, 11, 12, 13, 14, VII—1, 3, VIII-1, 2, 3, 5, IX-1, 3, 5, 6, 7, 9, X-1, 2, 3, XI-1, 3, XII-1, 2, 4, 5, 6, 7, 8, 9, XIII-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, XIV-1, 3, 4, 5.

REK—II-4, 5, 6, III-6, 7, IV-12, 13, V-13, 14, 15, 16, 17, VI-17, 18, 19, 20, VII-21, 22, VIII-22, 23, IX-24, 25, 26, X-27, 28, XI-29, 30, XII-30, 31, 32, 33, 34, XIII-35, 36, 37, 38, 39, South-face—4, 5, 6, 7, 8, 10, 11, 13, 14, 15, 16, 17, 18, XIV-19, 21, 22, 23.

RED—I-1, (in *Sayaṃ*) IX-1, XIV-3.

SRED—I-1, 2, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23, 24, 25, II-1, 3, 4, 5, 6, 7, 8, 9, 10, 11.

REJ—I-1, 2, 3, II-1, VI-1, IX-1.

SREJ—I-1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, II-2, 3, 4, 6, 7, 9, 12, 13, 14, 15, 16.

PEDT—VII-22, 30 (in *Dhamaniyamāni*),

PELA—I-4, 5, 6, II-1, 3, IV-1, 2, 5, 7, 9, 10, V-1, 2, 3, 7, 9, 11, 12, 13, VI-1, 2, 3, 5.

PELN—II-4, III-3, IV-2, 10, V-6.

PER—I-4, III-2, 3, IV-2.

MPE Queen's—1, 2, 4, 5.

MPE Kosambi—1.

MPE Sanchi—4, 6, 7, 8.

MPE Sarnath—4, 5, 6, 7, 8, 9, 10, 11.

MRE Bairat—1, 3, 8.

MRE Rupnath—2, 3, 4, 5.

MRE Sahasram—1, 4, 5, 6, 7.

MRE Maski—1, 4.

Slab Ins. Bhabru—3, 4, 5, 6, 7, 8.

MRE Brahmagiri—1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.

MRE Siddapur—1, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 15, 18, 20, 21.
MRE Jatinga Rameshwar—2, 5, 7, 11, 13, 14, 16, 18, 19.
MRE Erragudi—1, 3, 5a, 8, 11, 13b, 15, 17, 18, 19, 21 22, 23, 24, 25, 26.
Cave Ins. Barabar—I-1, 2, II-1.
MRE Rajula Mandagiri—4, 5, 8, 9, 10, 11, 12, 13.
MRE Gujjara—2 (in *Devānampiya*).
RE Erragudi—I-1, 4, II-1, 2, IV-3, 11, VI-3, VII-2, IX-3, 4, 12, X-1, 2, 3, XI-4, XII-2, 10, XIII-6, 8, 12, 2nd-1, 2, 3, 4, 5.

(7) REG—I-8, 9, II-1, 2, III-3, IX-1, 4, X-2, 3, XII-1, 3, 4, 8, XIII-5, 9, 10.
REK—I-1, 2, 3, 4, II-4, 5, 7, 8, IV-10, 13, V-13, 15, 16, VI-19, VII-21, VIII-22, 23, IX-25, 26, XII-35, XIII-38, South-face-3, 4, 5, 11.
SREJ—I-9 (in *Iyaṃ*), 11, II-1, 5.
PELA—III-2 (in *Dekhiye*).
Slab Ins. Bhabru—7.

(8) Slab Ins. Bhabru—4 (in *Vinaya*).
MRE Brahmagiri—10, 11.

(9) REG—II-5.
SRED—II-10 (in *Sotaviyā*).
MRE Erragudi—24 (in *Pavatitaviye*).

(10) MPE Sarnath—9 (in *Sayitave*).
MRE Brahmagiri—1 (in *Vataviyā*), 4 (in *Iyaṃ*).
MRE Jatinga Rameshwar—15.
MRE Erragudi—21 (in *Hathiyā...*).
MRE Rajula Mandagiri—1.

(11) REK—V-16 (in *Vayāpatā te Dhaṃmamahāmātā*), IX-26 (in *Iyaṃ puna*).

(12) ⊥ REK—XI-29, 30, (in *Iyaṃ Kaṭaviye*), XIV-22.
RED—VII-1, VIII-1.
SRED—II-10.
PELN—I-1, (in *Piyadasi*), III-3, (in *Isya*).
PER—II-1, (in *Devānampiya*), IV-4, (in *Āladhayeyu*), 5, 7, (in *Siyā*), 8, V-8, 10.
MRE Brahmagiri—3 (in *Mayā*).

(13) ↓ REG—VIII-3, IX-8, X-1, XII-9, XIII-7, 9.
REK—I-2, 3, X-27, (in *Yaso*), XII-33, XIII-South-face-9, 10, 11.
SRED—II-4 (in *Siyā*), 9 (in *Athāye*).
MRE Rupnath—4.
MRE Sahasram—3, 4.
MRE Sidddapur—17.

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APPENDIX No. 33

Ra

(1) REG—I-2, 3, 5, 7, 11, II-2, 4, 7, III-1, 2, IV-7, 12, V-1, 2, 5, VI-1, 3, 7, 12, 14, VIII-4, IX-9, XI-3, XII-5, 6, XIII-5, 12.
RE Bombay-Sopara—VIII-7, 9, IX-1, 2, 4, 6, 7, 8, 11.
MRE Brahmagiri—2, 5, 6, 7, 9, 12.
MRE Siddapur—3, 13, 18, 19, 20.
MRE Jatinga Rameshwar—16, 18, 19.
MRE Erragudi--10.
MRE Gujjara—1, 2, 3, 4, 5.

(2) REG—I-9, 12, II-1, 4, III-4, 5, IV-2, 3, 5, 6, 8, 10, V-3, 5, VI-1, 5, 7, 9, 10, 11, 12, 13, 14, VIII-1, 2, 5, IX-3, 4, 7, X-2, XII-1, 2, 4, XIII-2, 4, 7, 8, 10, 11, XIV-1.
MRE Siddapur—6, 10.
MRE Rajula Mandagiri—14.

(3) REG—I-11, II-8, III-4, 6, IV-1, 3, 4, 5, 7, 8, V-1, 3, 6, VI-9, VII-1, 2, VIII-2, IX-1, 3, 4, 8, 9, X-1, 3, 4, XI-1, 2, 4, XII-2, 3, 4, 5, 6, 7, 8, XIII-6, 8, 9, 10, XIV-4, 6.

(4) REG—I-8, 11, II-7, IV-5, 8, 9, V-1, 5, VIII-1, 3, 4, 5, XI-4, XIII-3, XIV-5, Below REG—XIII.
MPE Sanchi—4.
MRE Rupnath—1, 3, 4, 5.
MRE Maski—2, 3.
MRE Erragudi—3, 8, 11, 17, 18, 21, 24, 25.
MRE Rajula Mandagiri—2, 6, 8.

(5) REG—V-2.
MRE Gujjara—4 (in *Udāre*).

APPENDIX No. 34

La

(1) ल

REG—I-2, 10, II-2, 8, IV-9, 10, 12, V-1, 2, 7, 8, VI-3, 8, 9, 10, 11, 13, 14, VII-3, IX-1, 2, 3, 4, 5, 6, X-3, XI-4, XII-3, 7, 9, XIII-1, 8, 10, 12, XIV-1, 3, 5, 6, Below REG-XIII.

REK—I-1, 2, 3, II-4, 5, 6, III-6, 7, 8, IV-9, 10, 11, 12, 13, V-13, 14, 15, 16, 17, VI-17, 18, 19, 20, 21, VII-21, VIII-22, 23, IX-24, 25, X-27, 28, XI-29, 30, XII-31, 32, 33, 34, 35, XIII-35, 36, 37, 38, 39, South-face-5, 6, 7, 8, 9, 10, 13, 14, 15, 16, 17, 18, XIV-19, 20, 21, 22, 23.

RED—I-1, 3, 4, II-1, 2, 3, 4, III-1, 3, IV-1, 2, 3, 4, 5, 6, 7, 8, V-1, 3, 4, 5, 6, 8, VI-1, 2, 3, 4, 5, 6, 7, VII-1, 2, 3, IX-1, 2, 3, 7, X-2, 4, XIV-1, 2, 3.

SRED—I-1, 3, 5, 7, 8, 10, 11, 12, 13, 15, 16, 17, 18, 20, 21, 22, 23, 24, 26, II-1, 2, 3, 4, 6, 7, 8, 9, 10, 11.

REJ—I-1, 3, 4, 5, II-1, 2, 4, III-1, 3, IV-1, 2, 3, 4, 5, 6, 8, V-2, 3, VI-1, 2, 3, 4, 5, 6, 7, VII-1, VIII-3, 4, IX-1, 2, 3, 6, X-1, 3, XIV-2.

SREJ—I-1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, II-2, 4, 5, 6, 7, 9, 10, 11, 13, 15, 16.

PEDT—I-1, 2, 3, 4, 7, 8, 9, II-10, 13, 15, III-17, 21, 22, IV-1, 2, 3, 4, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, V-1, 3, 4, 5, 6, 8, 16, 17, 19, 20, VI-1, 2, 4, 10, VII-11, 12, 13, 15, 16, 19, 22, 23, 26, 27, 28, 29, 30, 31, 32.

PEDM—II-1, 3, 5, 6, III-1, 4, 5, 6, IV-1, 4, 5, 8, 12, 13, 14, V-11, 12, 13, 15, VI-2.

PELA—I-1, 2, 4, 5, II-2, 3, 4, III-3, IV-1, 2, 4, 5, 6, 7, 8, 9, 10, V-2, 3, 4, 5, 11, 12, 13, VI-1, 2, 5.

PELN—I-1, 2, 4, 5, 6, II-1, 3, 4, III-1, 3, 4, IV-1, 2, 4, 5, 6, 7, 8, 9, 10, 11, V-1, 2, 3, 4, 5, 6, 12, 13, 14, VI-1, 2, 6.

PER—I-1, 2, 3, 4, 5, II-1, 2, 3, III-1, 3, IV-1, 2, 3, 4, 5, 6, 7, 9, V-1, 2, 3, 4, 9, 10, 11, VI-1, 2, 4.

PE All. Kos.—I-1, 2, 3, 4, II-1, 2, 3, III-1, IV-1, 2, 3, 4, V-1, 2, VI-1, 3.

MPE Queen's—3, 5.

MPE Kosambi—2.

MPE Sanchi—8.

MPE Sarnath—6, 9.

MPE Lumbini—1, 3, 4.

MPE Nigliva—1.

MRE Rupnath—2, 3, 4, 5.

MRE Sahsram—1, 2, 3, 4, 5, 6, 7, 8.

MRE Bairat—4, 6, 7.

Slab Ins. Bhabru—1, 2, 4, 5, 6, 7, 8.

MRE Maski—6, 7.

MRE Brahmagiri—1, 3, 4, 5, 7, 12.

MRE Siddapur—2, 7, 8, 14.

MRE Jatinga Rameshwar—4, 8.

MRE Gujjara—2, 3, 4.

RE Erragudi—V-7, VI-9, VII-1, 4, IX 1, 2, 4, X-2, 3, 5, XII-6, XIII-2nd-3, 5, 7, XIV-5, 12.

Cave Ins. Barabar—I-1, II-1, 3, III-2.

(2) REG—XIV-6 (in *Lipikārā*).

REK—VI-20 (in *Palakamāmi*).

REJ—V-1 (in *Kālaṃ*).

SREJ—I-1 (in *Nagala*), 9 (in *Lipi*), II-4, 14.

PELA—V-1.

(3) PEDT—VII-32.
RE Erragudi—X-1, 3.

(4) REG—I-1, IV-II, IX-4 (in *Mahāphale*).
REK—I-3, II-6, IV-11, 13, V-17, VI-19, 20, IX-25, 26, 27, XII-32, XIII-South-face-7, 17.
SRED—I-1, 6, 16, II-5, 9.
REJ—I-2, IV-17.
SREJ—I-8 (in *Phale*), 9, II-1, 15.
PEDT—VII-12, 14, 15, 18, 22, 24, 27, 28, 29, 31.
PELA—IV-6.
PER—IV-4.
MRE Rupnath—2, 3, 4, 5.
MRE Sahasram—3.
MRE Rajula Mandagiri—4.
RE Erragudi—IV-10, 11, V-5, IX-5, XI-3.

(5) REK—I-2, II-6 (in *Phālāni*), IX-26 (in *Maṅgale*), X-28, 29, XII-32, XIII-36, South-face-4, 13, XIV-23.
RED—VI-2 (in *Kalami*), 6 (in *Palakamantu*).
SRED—I-19.
REJ—VI-6 (in *Alādhayantu*).
PEDT—VII-27 (in *Kumālānaṃ*).
PELA—I-1, 5, II-1, 3, III-1, IV-3, 4.
PELN—I-3, IV-1, 4, 5, 11.
PER—IV-1, 8, VI-1.
PE All. Kos.—V-2 (in *Gelaṭe*).
MRE Rupnath—1, 5.
RE Erragudi—VIII-2.

APPENDIX No. 35

Va

(1) 𑀯 REG—I-5, 8, 12, II-1, 3, 4, 6, 8, III-1, 5, 7, 9, 11, V-1, 2, 4, 5, 7, 8, VI-1, 2, 3, 4, 6, 7, 8, 9, 11, 14, VII-1, 2, 3, VIII-2, 4, 5, IX-1, 2, 5, 6, 7, 8, X-1, 2, 3, 4, XI-1, 2, 3, 4, XII-1, 2, 3, 4, 6, 7, 8, 9, XIII-1, 2, 3, 4, 6, 7, 8, 9, 10 11, XIV-1, 2, 3, 4, 5, 6, Below REG-XIII.

REK—I-1, 2, 3, 4, II-4, 5, 6, III-6, 7, 8, IV-9, 10, 11, 12, 13, V-13, 14, 15, 16, 17, VI-17, 18, 19, VII-21, 22, VIII-22, 23, IX-24, 25, 26, 27, X-27, 28, 29, XI-29, 30, XII-30, 31, 32, 33, 34 35, XIII-35, 36, 37, 38, 39, South-face-4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, XIV-19, 20, 21, 23.

RED—I-1, 2, II-1, 2, 3, III-1, 2, 3, IV-1, 2, 3, 4, 5, 6, 7, 8, V-1, 2, 3, 4, 5, 6, 7, 8, VI-1, 2, 3, 4, 5, VII-1, 2, VIII-1, 2, 3, IX-1, 3, 4, 5, 6, 7, X-1, 2, 3, 4, XIV-1, 2.

SRED—I-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 17, 19, 20, 21, 23, 24, II-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11.

REJ—I-1, 2, 3, 4, II-1, 2, 3, III-1, 2, 3, 4, IV-1, 2, 3, 4, 5, 6, V-1, 2, 7, VI-1, 2, 3, 4, 5, 7, VII-1, 2, VIII-1, 2, 3, IX-1, 2, 4, 5, 6, X-1, 2, 3, XIV-1.

SREJ—I-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, II-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 15, 16.

RE Bombay-Sopara—VIII-7, IX-1, 3, 6.

PEDT—I-1, 7, 9, II-11, 13, 16, III-17, 19, 20, IV-1, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, V-1, 3, 4, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, VI-1, 2, 4, 6, 7, 8, 9, VII-11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32.

PEDM—II-1, 3, III-1, 5, IV-4, 8, 9, 10, 11, 12, 14, V-2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15.

PELA—I-1, 4, 5, 6, II-1, 2, 3, 4, III-1, 2, 3, IV-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, V-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, VI-1, 2, 3, 4, 5.

PELN—I-1, 4, 5, 6, II-1, 2, 3, 4, 5, III-1, 2, 3, IV-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, V-1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, VI-1, 2, 3, 4, 5, 6,

PER—I-1, 3, 4, 5, II-1, 2, 3, III-1, 2, 3, IV-1, 2, 3, 4, 5, 6, 7, 8, 9, V-1, 2, 4, 5, 6, 7, 8, 9, 10, 11, VI-1, 2, 3, 4.

PE All. Kos.—I-1, 2, 3, II-1, 2, 3, III-1, IV-1, 2, 3, V-1, 2, 3, 4, 5, 8, VI-1, 2, 3.

MPE Queen's—1, 2, 3, 4, 5.

MPE Sanchi—5, 7.

MPE Sarnath—1, 2, 4, 5, 6, 7, 8, 9, 10, 11,

MPE Lumbini—1, 3, 4.

MPE Nigliva—1, 2.

MRE Rupnath—1, 2, 3, 4, 5, 6.

MRE Sahasram—1, 2, 3, 4, 5, 6, 7.

MRE Bairat—1, 2, 4, 5, 6.

Slab Ins. Bhabru—1, 2, 3, 4, 5, 6, 8.

MRE Maski—1, 2, 4, 5, 6, 7.

MRE Brahmagiri—1, 2, 4, 5, 7, 8, 9, 10, 11, 12.

MRE Siddapur—1, 2, 3, 4, 5, 8, 9, 10, 11, 14, 15, 16, 18, 19, 20, 21.

MRE Jatinga Rameshwar—1, 12, 13, 14, 15, 16, 18, 19, 20, 21.

MRE Erragudi—2, 3, 9, 13, 15, 18, 18a, 19, 22, 23, 24.

MRE Rajula Mandagiri—2, 7, 9, 12, 13.

RE Erragudi—I-6, II-1, 2, IV-3, 6, V-7, VII-3, 4, IX-17, XIII-1, XIV-1.

Cave Ins. Barabar—II-3, III-1, 2.

(2)

REG—I-1, 3, 8, 10, II-2, IV-1, 5, 6, 7, 8, 9, 10, 12, V-1, 2, 5, 6, 7, VI-2, 3, 5, 7, 8, 14, VII-1, 2, 3, VIII-1, 2, IX-1, 2, 3, 5, 7, X-2, 3, XI-1, 3, XII-5, 6, 8, XIII-1, 2, 4, 5, 6, 7, 9, 11.

REK—III-7, IV-9, 11, 12, IX-26, X-28, XII-31, 32, 33, 34, 36.

RED—IV-3 (in *Devānaṃ*), IX-5 (in *Vā*).

SRED—II-2 (in *Avijitānaṃ*).

SREJ—I-1, 6 (in *Savasa*).

PEDT—I-1, 2, 6, 7, 8, 9, II-10, 11, 12, 13, 15, III-11, 18, 19, 21, IV-1, 3, 7, 9, 10, 11, 13, 14, 15, 16, 17, 18, 20, V-1, 2, 7, 8, 10, 11, 12, 13, 14, 15, 17, 19, 20, VI-1, 3, 4, 5, 7, 9.

PEDM—I-1, II-2, 3, III-1, 3, 4, IV-4, 6, 13, 14 V-3, 7.

PELN—V-8.

MPE Kosambi—3, 4.

MPE Sarnath—5, 6, 10, 11.

MRE Rupnath—1, 2, 3, 4.

MRE Jatinga Rameshwar—2, 16.

MRE Erragudi—9, 24.

Cave Ins. Barabar—I-1, II-1, 2.

RE Erragudi—V-3, 4, XI-2, 3, XII-1, XIII-16, 2nd-2.

(3) REG—I-6, II-1, III-1, 2, IV-1, 2, 3, 4, 7, VI-2, X-3, 4, XII-2, XIII-7.
RED—XIV-1.
SREJ—II-1 (in *Devānam*).
REK—II-6, IV-11, V-15, VIII-22.
PEDM—IV-13.
MRE Bairat—8.
MRE Erragudi—5, 6, 8, 11, 12, 13, 18, 19, 21, 25, 26.
RE Erragudi—I-4, IV-8, 10, VII-1, 2, VIII-2, 3, IX-1, 10, XI-1, 3, 4, XIII-2nd-2, 4.

(4) REK—II-6.
MPE Queen's—1, 2.
MRE Erragudi—1, 7, 10, 20, 21, 25, 26.
MRE Rajula Mandagiri—1, 4, 5, 8, 10, 13, 14.

(5) REG—XIII-11 (in *Eva*).
REK—XIII-South-face-10 (in *Ṣavatā*).

(6) REG—III-1 (in *Dvādasa*), IV-12 (in *Dvādasa*).
MRE Erragudi—24 (in *Antevāsisu* and *Havaṃ*).

(7) REK—IX-26 (in *Pavasati*).
RE Erragudi—VII-4.

(8) PELA—IV-9 (in *Hevaṃ*).

APPENDIX No. 36

Śa (Palatal)

(1) REK—IV-13, XI-30, XII-31, XIII-37, South-face-9, XIV-21.
MRE Maski—2.
MRE Siddapur—17.
MRE Jatinga Rameshwar—18, 19.

(2) REK—XII-31 (in 2nd, *Śālāvaḍhi*).

(3) REK—XII-31 (in 1st *Śālāvaḍhi*), 34, XIII-35, 37.

(4) KEK—XII-31 (in *Siyāti* and *Palapāśaḍa*), 32.

(5) REK—XI-30 (in *Paśavati*).

APPENDIX No. 37

Ṣa (Cerebral)

(1) REK—X-27, 28, 29, XI-29, 30, XII-31, 33, 34, 35, XIII-35, 36, 37, 39, South-face-5, 6, 8, 9, 10, XIV-20 (in *Ṣave*, but Hultzsch reads it as *Save* : *C.I.I.*, p. 49), 22, 23.

MPE Queen's—1, 4.

MRE Maski—2 (in *Vaṣāni* (?), it is a doubtful reading).

(2) REK—X-28, XI-29, XIII-south-face-10.

(3) REK—X-28 (in *Ṣavaṃ*).

(4) Below REG—XIII.
MPE Sarnath-10.

(5) REK—X-27, XI-30, XII-33 (in *Ṣave*), XIII-39, South-face-4.

(6) REK—X-27, XIII-South-face-6.

(7) REK—XI-29, XII-35, 36.

(8) REK—XII-31 (in *Pāṣaḍāni*).

(9) REK—XI-29 (in *Bhaṭakaṣi*), XIII-38 (in *Ṣinehe*).

(10) REK—X-28, XI-29, XII-33, 34, XIII-35, 37, 38, 39, South-face-9, 10.

APPENDIX No. 38

Sa (Dental)

(1) REG—I-4, 5, 9, 11, 12, II-1, 2, 3, 4, 5, 6, 7, III-1, 2, 5, 6, IV-1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, V-1, 2, 3, 4, 5, 7, 8, VI-1, 3, 4, 5, 8, 9, 10, 11, VIII-1, 2, 4, 5, IX-1, 4, 5, 6, 7, 10, X-1, 2, 3, 4, XI-1, 2, 3, XII-1, 2, 3, 4, 5, 6, 7, 8, 9, XIII-1, 2, 3, 4, 5, 6, 8, 9, 10, 11, XIV-2, 3, 5.

REK—I-1, 2, 3, II-4, 5, 6, III-7, 8, IV-9, 10, 11, 12, 13, V-13, 14, 15, 16, VI-17, 18, 19, 20, VII-21, 22, VIII-22, 23, IX-24, 25, 26, 27, X-27, 28, XIII-South-face-11, 12, 13, XIV-19, 23.

RED—I-1, 2, 3, 4, II-1, 2, 3, III-1, 2, 3, IV-1, 2, 3, 4, 5, 6, 7, 8, V-1, 2, 3, 4, 5, 6, 7, VI-1, 2, 3, 4, 5, 6, 7, VII-1, 2, VIII-1, 2, 3, IX-1, 2, 3, 4, 5, 6, X-1; 2, 3, 4, XIV-1, 2, 3.

SRED—I-1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 21, 22, 23, 24, 25, 26, II-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11.

REJ—I-1, 2, 3, 4, 5, II-1, 2, 3, 4, III-1, 2, 3, IV-1, 2, 3, 4, 5, 6, V-3, VI-1, 2, 3, 4, 5, 6, 7, VII-1, 2, 3, 4, IX-1, 2, 3, 4, 5, 6, X-1, 2, 3, XIV-1.

SREJ—I-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, II-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16.

RE Bombay-Sopara—VIII-8, IX-1, 3, 8, 10.

PEDT—I-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, II-10, 11, 12, 13, 16, III-17, 18, 19, 20, 21, IV-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, V-1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, VI-1, 2, 3, 4, 5, 6, 7, 9, VII-11, 12, 20, 22, 25, 27, 28, 29, 30, 31.

PEDM—II-1, 2, 3, 7, III-1, 3, 4, 5, IV-6, 8, 9, 10, 11, 12, 13, 15, V-2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, VI-1, 2.

PELA—I-1, 2, 3, 4, 5, 6, II-1, 2, 4, III-1, 2, 3, IV-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, V-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, VI-1, 2, 3, 4, 5.

PELN—I-1, 2, 3, 4, 5, 6, II-1, 2, 3, 5, III-1, 2, 3, 4, IV-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, V-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, VI-1, 2, 3, 4, 5, 6.

PER—I-1, 2, 3, 4, 5, II-1, 2, 3, III-1, 2, 3, IV-1, 2, 3, 4, 5, 6, 7, 8, 9, V-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, VI-1, 2, 3, 4.

PE All. Kos.—I-1, 2, 3, 4, II-1, 2, 3, III-1, IV-1, 2, 3, 4, V-1, 2, 3, 4,5, VI-1, 2, 3.

MPE Sanchi—4, 6, 7, 8.

MPE Sarnath—3, 4, 5, 6, 7, 8, 9, 10, 11.

MPE Lumbini—1, 2, 3.

MPE Nigliva—1, 2, 3.

MRE Brahmagiri—1, 2, 3, 4, 5, 6, 7, 9, 10, 11.

MRE Rupnath—1, 2, 3, 4, 5.

MRE Jatinga Rameshwar—10, 13, 14, 15, 16, 17, 19.

MRE Sahasram—1, 2, 3, 4, 5, 6, 7, 8.

MRE Bairat—1, 2, 3, 4, 5, 8.

Slab Ins. Bhabru—1, 2, 3, 4, 5, 6, 7, 8.

MRE Maski—1, 2, 3, 4, 5, 8.

MRE Siddapur—1, 5, 7; 8, 10, 11, 14, 15, 19, 21.

MRE Erragudi—1, 2a, 3, 4, 5, 6, 7, 9, 17, 18, 19, 21, 22, 24, 25, 25a.

MRE Rajula Mandagiri—2, 4, 5, 8, 9.

RE Erragudi—I-6, II-1, 2, III-1, IV-5, 9, 11, 12, V-1, 2, 3, 5, VII-1, 2, 4, VIII-4, IX-5, 7, X-1, 2, 3, 4, 5, XI-1, 2, 4, XII-3, 5, 7, 9, 12, XIII-2nd-1, 2, 4, 5.

Cave Ins. Barabar—I-1, II-1, 2, III-1, 2, 4.

(2) MPE Kosambi—1, 2, 3.

(3) REG—II-5, 7, 8, III-1, 2, 3, 4, IV-1, 2, 3, 4, 5, 6, 7, 9, V-3, VI-3, 7, 8, 9, 10, 11, 12, 14, VII-1, 2, 3, VIII-1, 2, 3, 4, 5, IX-2, 5, 6, 7, 8, X-1, 2, 3, 4, XI-1, 2, 4, XII-2, 3, 5, 6, 8, XIII-1, 2, 3, 4, 5, 7, 10, XIV-1, 4, 5.

REK—XIII-South-face-12, 14, 15.

MRE Brahmagiri—9 (in *Saoaṃ*), 12 (in *Esā*).

MRE Siddapur—1 (in *Putasa*), 2, 4, 5, 6, 18.

MRE Jatinga Rameshwar— 2.

RE Erragudi—IV-2, 3, V-5.

(4) REG—IV-10 (in *Seṭe*).

REK—IX-26 (in *Sādhu*), XIII-South-face-13 (in *Se Gadhā*).

SREJ—I-2 (in *Panasata*), II-2 (in *Esa*).

PEDT—VII-14 (in *Esa Me*).

PELA—V-6 (in *Sajīve*).

PELN—I-1 (in *Vasa Bhi...*).

PER—V-11, (in *Saḍu . .*), VI-3 (in *Sava Nikāye*).

(5) PELA—II-4 (in *Pajisati*).

PE All. Kos.—IV-2 (in *Daṅḍasamatā*).

MRE Bairat—2 (in *Upāsake*).

MRE Erragudi—3, 5, 11, 18, 23, 25.

(6) REK—XI-29 (in *Samanā*).
MPE Queen's—1.
MPE Sarnath—5, 7, 8, 9.

(7) REG—1, 2, 4, 5, 6, 7, 8, 9, 10, 11, II-1, 4, III-5, IV-9, 10, V-7, 10, VIII-2, 3, X-4, XI-2, 4, XII-4, 6, 9, XIII-1, 3, 11, XIV-1, 3.
REK—I-2, II-4, 6, III—6, 7, 8, IV-9, 10, 11, 12, V-14, 15, 16, VI-17, 18, 19, VII-21, VIII-22, 23, IX-24, 25, 26, X-27, XIV-19.
SRED—I-12, 24, II—8, 10.
REJ—I-3, IV-3.
PEDT—V-1, 20, VII-12, 14, 15, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32.
PEDM—V-5, 9, 11, 12.
PELA—VI-1.
PELN—II-1, III-2, V-4, 14.
PER—VI-1.
PE All. Kos.—I-3, 4, IV-4.
MRE Erragudi—3.
MRE Rajula Mandagiri—7.
RE Erragudi—I-4, III-1, IV-7, XII-4.

(8) REG—I-8, II-8, III-2, IV-3, 8, V-4, 6, VI-6, VII-2, VIII-1, 2, IX-4, 10, XI-2, XII-1, 8, XIII-1, 10.
RE Erragudi—V-1.

APPENDIX No. 39

Ha

(1) 𑀳 REG—I-3, II-1, III-1, IV-7, V-4, 9, VI-1, 3, 4, 6, 9, 10, 11, 14, IX-1, 2, 8, XI-2, 4, XII-3, 4, 5, 6, 7, 9, XIII-1, 3, 5.

RED—II-3, III-1, IV-1, 4, 6, 7, V-1, 2, 3, 5, 6, 7, VI-1, 2, 4, 5, 6, VII-1, VIII-1, 3, IX-2, 5, 6, X-2, XIV-1, 2.

SRED—I-1, 2, 4, 5, 8, II-8.

REJ—I-1, 2, 3, III-1, 4, IV-1, 3, 4, 5, 7, VI-1, 3, 4, 5, 6, 7, VII-1, VIII 1, 3, IX-2, 5, 6, X-2, XIV-1, 2.

RE Bombay-Sopara—VIII-6, 7, 8, IX-1, 2, 3, 8.

PEDT—VII-27.

PEDM—II-2, 6.

PE All. Kos.—I-1, 4, II-1, 2, III-1, IV-3, 4, V-1, VI-2.

MPE Sarnath—5, 6, 7, 8, 9, 10.

MPE Lumbini—2.

MPE Nigliva—3.

Slab Ins. Bhabru—1, 2, 3, 4.

MRE Brahmagiri—1, 2, 4, 6, 9, 10, 11.

MRE Siddapur—1, 3, 4, 8, 12, 13, 19, 20.

MRE Jatinga Rameshwar—3, 13, 15, 16, 20.

MRE Rupnath—1.

MRE Sahasram—3, 5.

MRE Bairat—1, 2.

MRE Erragudi—1, 19.

REK—I-1, 3, IV-9, 10, V-13, 14, 15, 16, VI-18, 19, 20, VII-21, VIII-22, 23, IX-24, 26-27, X-27, 28, XI-29, 30, XII-31, 32, 33, 34, 35, XIII-35, 36, 37, 38, South-face-8, 14, 18, XIV-21.

RE Erragudi—I-4, VIII-2.

(2) REG—I-9, II-6, IX-4, 7, XII-2.
RED—IV-3, V-3, VI-3, IX-1, XIV-2.
PEDT—VII-11, 12, 14, 15, 20, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31.
PE All. Kos.—I-1, 4, II-3.
MRE Maski—7, 8.
REK—II-6, III-8, IV-10, 12, V-14, 17, VI-17, 18, VIII-22, 23, IX-24, 25, 26, 27, XI-25, XII-32, XIII-South-face-8, 14, 16, XIV-20.
RE Erragudi—XI-2.
RE Bombay-Sopara—IX-5.

(3) MRE Maski—5.

(4) REG—I-4, 7, 9, III-6, IV-3, 4, 11, V-3, 6, VI-8, 9, VIII-3, IX-2, 3, 7, 8, XII-4, 8, 9, XIII-1, 4, 5, Below REG-XIII.
SRED—I-2, 4, 5, 9, 10, 12, 13, 14, 15, 16, 18, 21, 22, 24, 25, II-1, 2, 3, 5, 6, 7, 8, 9.
SREJ—I-3, 5, 8, II-1, 2, 3, 6, 7, 9.
PEDT—I-1, 3, 5, 8, 9, II-11, 12, 13, 15, 16, III-17, 19, 22, IV-1, 3, 5, 6, 7, 10, 11, 12, 15, 18, 19, V-1, 3, 10, 15, VI-1, 3, 4, 5, 6, VII-1, 2, 3, 26, 28.
PEDM—II-4, III-1, 3, 5, IV-4, 8, 13, V-3.
PELA—I-1, 2, 3, 5, II-1, 2, 3, 4, III-1, 3, IV-1, 2, 3, 6, 7, 9, V-1, 3, 10, VI-1, 2, 3, 4.
PELN—I-1, 2, 6, II-1, 3, 4, 5, III-1, 2, 3, 4, IV-1 3, 6, 7, 8, 10, V-8, VI-1, 2, 3, 4.
PER—I-1, 4, II-3, III-1, 2, 3, IV-1, 2, 3, 5, 6, 7, 8, 9, V-1, 2, 6, VI-1, 2, 3.
MPE Kosambi—2.
MPE Queen's—1, 2.
MPE Sanchi—7.
MRE Rupnath—1, 2, 5.
MRE Erragudi—3, 6, 9, 11, 18, 21, 23, 24, 25, 25a.
Cave Ins. Barabar-I-1, II-1.

MRE Rajula Mandagiri—1, 2, 4, 7, 10, 13.
RE Erragudi—I-2, VI-6, IX-1, 5, X-1, XI-1, 5, XII-4, 7, 12, XIII-12, 14, 2nd.-1, 2, XIV-3.
MRE Gujjara—2.

(5) REG—II-7, IV-1, 6, VIII-1, 4, X-1, XI-1, 2, XII-3, 9, XIII-2, XIV-3.
SRED—II-8.
SREJ—II-1, 2, 3.
PEDT—II-12, 13, III-21, IV-14, VII-15, 19, 23, 27, 28, 29.
PEDM—II-3.
PELA—IV-1, 5, 6, 7, V-7, VI-2, 3.
PELN—I-3, II-1, IV-1, 2, 7, 10, V-1, 2, 11, VI-1, 2.
PER—I-2, II-1, 2, 3, III-1, IV-1, 6, 7, VI-1, 2.
MRE Bairat—5.
MRE Rajula Mandagiri—6.
RE Erragudi—VI-1, VIII-2, X-1.

(6) SREJ—I-1, 2, 4, 7, II-4, 8, 11, 12, 16.
PER—VI-1.
MRE Erragudi—2, 5.

(7) SREJ—I-1, 2, 4, 8, 11, II-10, 14.
MRE Erragudi—2, 5.

(8) SREJ—I-6.

(9) PELA—VI-2.
PER—IV-3, VI-2, 3.

(10) SREJ—I-2, 3, 5.
MRE Erragudi—13.

(11) MPE Kosambi—1 (in *Mahāmāta*).

APPENDIX No. 40

Medial ī

ANGULAR

(1) (*Kī*) REG—II-4, 5, X-1.

(2) (*Khī*) SRED—I-9.
PEDT—IV-6.
PELA—I-6, IV-3.
PELN—IV-3.
PER—I-5, IV-3.
PE All. Kos.-I-4.

(3) (*Jī*) RED—III-1.
REJ—I-1, III-3.
PEDT—II-16, IV-17, V-9, 11, 14, VII-21, 24, 25.
PEDM—V-2, 4, 8.
PELA—IV-8, V-6, 7, 9.
PELN—IV-10, V-8, 11.
PER—IV-8, V-5, 6, 8.
PE All. Kos.-IV-3, V-4.

(4) (*Tī*) REG—VIII-4, XI-3, XIII-4.
RED—X-1.
REJ—X-1.
PEDT—VII-21, 24, 26, 27, 28, 31.

(5) [i] (*Ḍhī*) REG—XII-2, 8.
RED—IV-7.

[ii] PEDT—I-6.

(6) (*Nī*) REG—II-3, VI-4.

(7) (*Ḍī*) PE All. Kos.—V-2.

(8) (*Ṇī*) PEDT—V-4.

(9) [i] (*Tī*) REG—IV-1, 2, VI-7, XIII-10.
RED—V-6, 8, VI-3, 4, 5, 6.
REJ—V-2, VI-4, 5, 6.
RE Bombay-Sopara.—9.
PELN—I-7, IV-9, V-8, 12.
PER—II-3, IV-7, V-6, 9.
PE All. Kos.—II-3, IV-2.
PELA—I-6, II-4, IV-8, V-7, 10.
MRE Gujjara—1, 2.
MPE Sanchi—8.
Slab Ins. Bhabru—4.
MRE Brahmagiri—6, 12.
MRE Siddapur—13, 19.

[ii] PEDT—I-10, V-7, 11.
PEDM—III-2, V-4, 10.

(10) (*Thī*) RED—IV-2, VIII-3, IX-2.
SRED—I-22, 26.

(11) [i] (*Dī*) PELA—V-2.
PELN—V-3.
PER—V-2.
MRE Sahasram—2.
MRE Brahmagiri—3.
MRE Gujjara—2.

[ii] PEDT—V-3.

(12) [i] (*Dhī*) REK—II-5.
RED—VII-1, 2, IX-7.
REJ—VII-1.

PELA—I-4.
PELN—I-5.
PER—I-4.
PE All. Kos.—I-3.

[ii] PEDT—I-7.

(13) [i] (*Ni*) PELN—V-6, 12, 13.
PER—V-4, 10.
MPE Lumbini—2.
PEDT—16, 17.
PELA—V-5, 11.
RED—V-6, VI-2, VII-2.
REJ—I-7.
MRE Erragudi—16.

[ii] PEDT—V-8, 17.
PEDM—V-11, 12.

(14) [i] (*Pi*) REG—I-10, VI-13, VIII-10.
RED—I-4, V-8, VI-6, XIV-1.
REJ—I-1, 4, VI-6.
SREJ—I-9, 10, II-14.
PE All. Kos.—VI-3.
MPE Sarnath—6.

(ii) PEDT—V-4.

(15) [i] (*Bhi*) RED—V-6.
PELN—IV-3, 7.
PER—IV-2, 6.
MPE Lumbini—3.

(ii) PEDT—IV-4, 12.
PEDM—IV-5.
PELA—IV-1, 6.

(16) [i] (*Mi*)
REG—IX-2.
SRED—I-16.
SREJ—II-12.
MRE Erragudi—8.
MRE Sahasram—4.
PELA—V-5, VI-3.
PELN—III-3, VI-4.
PER—III-2, V-5.
PEDT—III-20.
MRE Gujjara—3.

[ii]
PEDT—V-8, 15.
PELN—V-6.
PER—V-6.
PE All. Kos.—V-3.

(17) (*Yi*)
MRE Brahmagiri—3.
MRE Siddapur—6.

(18) (*Ri*)
MRE Brahmagiri—1.

(19) [i] (*Li*)
PELA—I-2, V-5.
PELN—I-3, V-6.
PER—I-2, V-4.
PE All. Kos.—I-1, IV-2.
MRE Gujjara—2, 3.

[ii]
PEDT—I-4, V-8.

(20) [i] (*Vi*)
REG—XIII-10.
RED—IX-1.
PEDM—V-14.
PELA—IV-1, V-1, 13, VI-4.
PELN—I-1, IV-1, V-1, 14.
PER—I-1, IV-1, V-1, 11, VI-4.
PE All. Kos.—I-1, V-1.
MPE Lumbini—1.

[ii] PEDT—I-1, IV-1, V-1, [illegible]
PEDM—V-15, VI-6.
MPE Queen's—2.

(21) [i] (*Si*) REK—IV-12.
RED—III-1, IV-5, 6, 7, V-1, VI-1, VII-1, VIII-2, IX-1, X-1.
REJ—I-2, III-2, VI-1, VII-1, IX-1.
PEDT—V-16,
PELA—V-7, 10.
PELN-V-8, 12.
PER—V-6, 9.
PE All. Kos.—I-1, II-1, III-1, V-1, VI-1.
Slab Ins. Bhabru—2.
MRE Erragudi—24.
RE Erragudi—I-5.

[ii] PEDT—V-11.
PEDM—V-4, 10.
RE Erragudi—XIV-1.

(22) [i] (*Hi*) REG—IV-11.
RED—IV-7.
MRE Brahmagiri—4.
MPE Lumbini—2.
MPE Nigliva—3.

[ii] MRE Rajula Mandagiri—4.

CURSIVE

(23) [i] (*Ki*) REG—II-5.

[ii] MPE Queen's—4.

(24) (*Ḍhi*) REG—XII-2, 9.

(25) (*Tī*) REG—IV-2, 6, VI-9, 10, IX-4, XI-2, XII-3, XIII-1.
MRE Jatinga Rameshwar—19.
MPE Queen's—5.

(26) (*Thī*) REG—XII-9.

(27) (*Dī*) REG—XII-5, 9.

(28) (*Dhī*) REG—IV-11, IX-9.

(29) (*Nī*) REG—IV-11.
MPE Queen's—4.

(30) (*Pī*) REG—I-1, V-9, XIV-1.

(31) (*Bhī*) REG—V-7.

(32) (*Mī*) REG—XII-9.

(33) (*Rī*) REG—IV-3.
MRE Siddapur—1.

(34) (*Vī*) REG—IX-2.

(35) (*Sī*) REG—IV-10.
Cave Ins. Barabar—III-1,
MRE Erragudi—22, 25a.

(36) (*Hī*) REG—IV-6.

APPENDIX No. 41

Medial Ū

(1) (*Kū*) REG—II-8.

(2) [i] (*Khū*) MPE Sanchi—3.

[ii] MPE Sarnath—4.

(3) [i] (*Cū*) REK—I-4.

[ii] PEDT—VI-8.
PELA—VI-4.
PELN—VI-5.
PER—VI-4.

(4) [i] (*Jū*) REG—I-3, III-2.
PEDT—IV-2, 4, 8, 9, 12, 13.
PEDM—IV-5, 7.
PELA—IV-1, 2, 4, 5, 6.
PELN—IV-1, 2, 4, 5, 7, 8.
PER—IV-1,;2, 4, 5, 6.
MRE Rajula Mandagiri—8.

[ii] PEDT—VII-22.
REK—I-4, III-7.

(5) (*Tū*) SREJ—II-9.

(6) [i] (*Thū*) SRED—I-11.
SREJ—I-5.
PELN—III-3.
PER—III-2.

[ii] PEDT—III-20.
PEDM—III-4.
PELA—III-3.

(7) (*Tū*) RED—IV-7, VI-6.
SRED—I-11.
REJ—I-6.
PEDT—II-16, V-4.
PEDM—II-6.
PELA—II-3, V-2.
PELN—II-4, V-3.
PER—II 3, V-2.
PE All. Kos.—II-3, V-2.
Slab Ins. Bhabru—1, 8.
MRE Erragudi—17.
RE Erragudi—V-7, X-2.
MRE Gujjara—4.

(8) (*Du*) REG—XIII 9.

(9) (*Dhū*) REG—XIV-4.
RED—IV-7, IX-5.
REJ—IX-6.
PEDT—II-11.

(10) (*Nū*) PEDT—VII-28.

(11) [i] (*Pū*) REG—XII-1, 2.
PELA—VI-4.
PELN—VI-5.
PER—VI-3.

[ii] PEDT—VI-7, 8.
REG—XII-1, 3, 4.
PE All. Kos.—VI-3.

(12) (*Bhū*) REG—IV-1, 5, 6, V-4, VI-2, 11, XII-9, XIII-7.
RED—IV—1, 4, VI-5.

			MRE Maski—4. REJ—IV-4. MRE Erragudi—5a.
(13) [i]	(*Mū*)		REG—II-7. RED—II-3, VI-5. REJ—VI-5. SREJ—I-5.
[ii]			REG—VI-10, XII-3. SRED—I-12.
(14) [i]	(*Yū*)		SRED—I-20. SREJ—I-3, II-3, 5, 7, 14. MRE Brahmagiri—8. MRE Erragudi—21.
[ii]			Slab Ins. Bhabru—7. MRE Erragudi—13.
(15) [i]	(*Rū*)		REG—IV-4, IX-4.
[ii]			MRE Erragudi—18.
(16)	(*Lū*)		RED—VI-3. REJ—IV-3, IX-3.
(17) [i]	(*Vū*)		RED—III-2, VII-1. SRED—I-6, 11, II-6. REJ—III-2. PEDT—IV-5, 8, 19. PELA—IV-9, 11. PELN—IV-11. MRE Erragudi—9.
[ii]			SRED—I-20, II-5, 7 PEDM—IV-6. PELA—IV-2, 6. PELN—IV-3, 4, 7. PER—IV-2, 4, 6, 9.

(18) [i] (*Śa*) REG—I-11, II-8.
RED—I-3, III-7, IV-4, 7, X-2.
REJ—I-3, X-1.
PE All. Kos.—I-2.
Slab Ins. Bhabru—5.
MRE Brahmagiri—9.

[ii] REG—I-9, III-4.
SREJ—II-5.
PEDT—I-4, V-8.
PEDM—V-11.
PELA—I-3, V-5.
PELN—I-3, IV-2, V-6, 12.
PER—I-2, V-4, 9.
MPE Sanchi—4.
RE Erragudi—XI-2.
MRE Gujjara—3.

(19) [i] (*Hū*) RED—IV-1, 3, V-3, VI-1.
REJ—I-3, IV-1, 3, VI-1.
PEDT—IV-3.
PEDM—II-4.
PE All. Kos.—II-2.
RE Bombay-Sopara—IX-4, 5.

[ii] REG—IV-1, 4.
SRED—I-4.
SREJ—I-2.
PELA—II-3, IV-1.
PELN—II-3.
PER—II-2, IV-1.

APPENDIX No. 42

Medial Ai

(1) (*Cai*) REG—XIII-7.

(2) (*Thai*) REG—IV-7, VIII-3.

(3) (*Trai*) REG—V-4.

(4) (*Mai*) MRE-Brahmagiri—6.

APPENDIX No. 43

Conjuncts

(1) (*Kya*) REK—III-8, IV-11, V-16, 17, 20, X-26, XI-29, 30, XII-34, XIII-38, South-face-8, 9, 14, 17, 18, XIV-21.
PEDT—VII-23.
MPE Lumbini—2.
MRE Bairat—6.
MRE Brahmagiri—4, 5.

(2) (*Kra*) REG—VI-1, 11, 14.

(3) (*Khya*) SRED—I-3, II-2.
PEDT—VI-9.
PEDM—VI-1.
PELA—VI-1.
PELN—VI-6.
PER—VI-4.
PE All. Kos.—VI-3.

(4) (*Gya*) REK—XIII-35, 36.

MRE Erragudi—21.
MRE Rajula Mandagiri—11.

(5) (*Cya*) Slab Ins. Bhabru—6.

(6) (*Tya*) PELA—VI-3.
PELN—VI-3.
PER—VI-2.
PE All. Kos.—VI-2.

(7) [i] (*Tra*) REG—I-9, 12, II-4, IV-8, V-4, VI-4, 5, 6, 12, VII-1 (in *Sarvatra* not-noticed by Hultzsch), IX-2, 6, 7, XI-3, XIII-5.
RE Bombay-Sopara—IX-3.

[ii] REG—VI-13, X-3, XIII-1, XIV-5.

[iii] REG—II-6, X-4, XII-8.

[iv] REG—III-4, VI-13, XIII-3 (These are the Hultzsch's readings. He believes the horizontal stroke on the right to be intended for *R*: *C.I.I.*, Vol. I, p. 23).

[v] REJ—II-4 (Hultzsch: *C.I.I.*, Vol. I, p. 102).

(8) (*Tva*) REK—X-27.
RED—X-1.
REJ—X-1.

(9) [i] (*Dra*) MRE Brahmagiri—9.

[ii] REJ—I-2 (Hultzsch thinks that the horizontal stroke may be meant for *R* which seems to be attached both at the top and at the bottom of *Da*: *C.I.I.*, Vol. I, p. 101).

[iii] REJ—I-3 (Again, Hultzsch says that the curve at the bottom of *Da* is possibly intended for *R*: *C.I.I.*, Vol. I, p. 101), VI-3.

(10) [i] *Dva* REG—I-11.

[ii] REG—III-1, IV-12.

(11) (*Dhya*) PELA—V-1, 6, 8.
PELN—V-6,9.
PER—V-1, 5, 7.

(12) [i] (*Dhra*) REG—XIII-9 (Hultzsch thinks that 'the apparent *E* stroke attached to *Dha* is probably meant for *R*.' : *C. I. I.*, Vol. I. p. 24 (Foot-note No. 7).

[ii] (*Dhru*) REG—I-12 ("The two distinct strokes at the bottom of *Dha*, one of which is *U* while the upper one is probably *R*." : Hultzsch—*C. I. I.*, Vol. I, p. 2).

[iii] (*Dhru*) REK—I-4 (Hultzsch : *C. I. I.*, Vol. I, p. 27).

(13) (*Nya*) SREJ—I-5.

(14) [i] (*Pra*) REG—I-2, 3, 5, 7, 9, 12, III-2, IV-2, 8, V-1 4, VI-2, VIII-2, X-1, XI-1, 3.
RE Bombay-Sopara—IX-3.

[ii] REG—X-3, XII-4, XIII-5, 8.
MRE Erragudi—18 (not noticed by Dr. Sircar).
MRE Rajula Mandagiri—2, 9.
RE Erragudi—I-6 (?).

[iii] REG—I-1, 7, 8, 10, IV-1, 2, 5, 7, VI-13, VIII-5, IX-1, 4, XIII-2, XIV-1.

[iv] MRE Brahmagiri—2 (Hultzsch : *C. I. I.*, Vol. I, p. 176).

[v] REG—XII-3 (The conjunct *Pra* looks like *Ha*. Hultzsch thinks that the horizontal stroke attached to *Pa* is probably intended for *R* : *C. I. I.*, Vol. I, p. 20).

[vi] (*Pre*) Slab Ins Bhabru—8 (Hultzsch thinks the horizontal stroke attached to *Pa* is probably intended for *R* : *C. I. I.* Vol. I, p, 173.)

[vii] REJ—VI-2 (The letter looks like *Pe* but Hultzech reads it as *Pra* and believes that the *R* is expressed by a horizontal stroke before *Pa* :*C I.I.*, Vol. I, p. 106).

[viii] MRE Rupnath—1 (The letter looks like *Pā* but Hultzsch took it as *Pra* : *C I I*, Vol I, p 166)

(15) [i] (*Pta*) REG—X-1, 4, XII-3, 5, 6.

[ii] REG—IV-4, VI-11, XII-4, 5, 6, 9.
MRE Brahmagiri—4, 6.
MRE Erragudi—6.
MRE Rajula Mandagiri—4.

(16) (*Brā*) REG—IV 2, 6

(17) (*Bhya*) PEDT—VII-19, 21.

(18) [i] (*Mya*) REG—IX-4, XI-2.

[ii] REK—IX-25, XI-29, XIII-37

[iii] RED—IX-3

(19) (*Mha*) REG—I-3, II-1, IV-6, 9, 10, VI-3, 4, 9, VIII-3, IX-2, 4, 5, 8, XI-2, XII-4, XIII-3, 5, 9, 10.

(20) (*Vya*) REK—IX-10.
SREJ—I-7.
MRE Rupnath—5.
MRE Siddapur—14.
MRE Brahmagiri—8, 9.
MRE Jatinga Rameshwar—17.
MRE Erragudi—13.
RE Erragudi—V-6 (?).

(21) [i] (*Yva*) REG—I-3, III-5, 6, IV-4, 12, V-8, VIII-1, IX-3, 5, 8, 9, XI-2, XII-8, 9.

[ii] REG—I-4, VI-9, IX-6, XIV-11.

(22) [i] (*Rva*) REG—II-1, 4, 6, III-2, V-8, VI-3 (not noticed by Hultzsch) 8, 9, 11, VII-1, 2.

[ii] REG—VI-5, X-4 (not noticed by Hultzsch), XII-8, XIV-2, Below REG-XIII.

[iii] (*Rve*) Slab Ins. Bhabru—3 (See Hultzsch : *C.I.I.*, Vol. I, p. 173.).

(23) (*Vra*) REG—II-8.

(24) (*Sva*) MRE Bairat—6.

(25) (*Sja*) REG - III-3, IV-5, 9, 10, V-4, 5, VI-4, 9, 10, 12, VIII-4, IX-6.

(26) [i] (*Sta*) REG—I-6, II-6, IV-8, 10, IX-6, XI-1, XIV-3.

[ii] REG—III-4, IX-7, XI-2, 3, XII-1, XIII-3, 5, XIV-2.

[iii] REG—VII-3.

(27) (*Spa*) REG—VIII-4.

(28) (*Sma*) SRED—I-9, 20, 21.
SREJ—I-5.

(29) (*Sya*) SREJ—I-6.
PEDT—III-20.
PEDM—III-5.
PELN—III-3,
PER—III-3, V-6.
PELA—III-3.

(30) [i] (*Sra*) REG—I-9, X-2, 3, XI-2, XII-7, XIII-1.

[ii] REG—III-4, IV-2, 7, V-8, VI-6, XIII-6.

(31) (*Rsa*) REG—VI-3 (?) (Hultzsch : *C. I. I.*, Vol. I. p. 6).

(32) [i] (*Sta*) REG—IX-9.
REK—VI-20.
RED—VI-6.
SRED—I-15, 16, 20, II-5, 7, 8, 9.
REJ—IX-6.
SREJ—I-8, 9, 10, II-12, 13, 14.
PEDT—IV-4, 11, 13, V-18.
PEDM—IV-3, 6, V-13.
PELA—IV-2, 5, 6, V-12.
PELN—IV-2, 6, 7, V-13.
PER—IV-2, 5, 6, V-10.
MRE Brahmagiri—5.
MRE Jatinga Rameshwar—10,

[ii] MPE Sarnath—8, 9.
MRE Gujjara—3.

[iii] REG—VI-12, Below REG-XIII.
SRED—II-10.
SREJ—II-6, 9.
MRE Rupnath—3.
MRE Jatinga Rameshwar—15.
MRE Erragudi—8.

(33) (*Hya*) MRE Brahmagiri—9.
MRE Siddapur—14.

(34) (*Hve*) SREJ—I-6, II-5.

(35) (*Hma*) REK—XIII-39.

APPENDIX No. 44

Corrections

(1) OMITTED LETTERS ENGRAVED :

[i] *Above the line* :

REK—XII-31—the letter *Vi* in the word *Bahuvidhā*; the letter *Ta* in *Atapāśaḍa*; the words *Palapāśaṇḍagalahāva* are entered above the line while below the words *Ti apaśalahā vā* are struck out. •

32—the letter *Pi* in *Pāsaṇḍa pi vā*; the letter *Da* in *Kaleti tada*; the letter *Pā* in the third *Palapāśaṇḍa*.

XIII-38—the syllable *Nā* in the word *Nātikya* seems to be entered above the line. (Hultzsch : *C. I. I.*, Vol. I, p. 45).

XIII-South-face-13—the word *Vijaye* is engraved above the line.

XIV—the letter *Śā* in *Śāyā*.

RE Bombay-Sopara—VIII-7-*Vuḍhānaṃ Dasane* are engraved above the line in small letters.

MRE Bairat—4-the letter *Mi* in *Amisā*.

MRE Sahasram—the letter *Pi* is engraved above the line.

PEDT—VII-17—the second *Pa* in *Anupaṭipajāya*.

[ii] *Below the line* :

REK—XI-30—the letter *Ta* int *Mitasanthu......*; the letter *Na* in *Putena* seems to be entered below the line. (Hultzsch : *C. I. I.*, p. 49. But it is not clear).

XIV-20—The letter *Te* in *Ghaṭite*.

(iii) *Small letters inserted* :

REG—IV-2—the letter *Di* in *Piyadasino.*

IV—V-2—the letter *Pa* in *Asampratipati* ;
the letter *Ta* in *Ta Aja.*

IV-6—the letter *Hi* in *Avihisā,*

V-9—the letter *Ya* in *Etāya,*

XII-3—the letter *Saṃ* in *Parapāsaṃḍagarahā,*

XII-7—the letter *Ti* in *Kiti,*

XIV-4—the letter *Sa* in *Athasa.*

REK—X-28—the letter *Na* in *Apune.*

XI-30—the letter *Ta* in *Vataviya,* (not noticed by Hultzsch).

(iv) *Large letters inserted* :

REG—V-6—the letter *Na* in *Badhanabadhasa.*

XII-31—the letter *Na* in *Śavapāśadāna.*

PEDT—III-17—the letter *Kha* in *Dakhati.*

(2) ERASURES :

REG—I-3—Before *Rāja,* a superfluous *Ra* seems to have been struck out by the writer. (Hultzsch : *C. I. I.*, Vol I, p. 1).

IV-11—between *Thā* and *Ya* in the word *Athāya.* (Hultzsch thinks, the vacant space either due to a natural fissure or a deliberate erasure. *C. I. I.*, Vol. I, p. 7).

IV-11—Vacant space *Hi* and *Ni* is probably erased.

V-11—A vacant space between *Rā* and *Jā* is probably erased.

X-1—An obliterated *De* is visible between the syllables *Si* and *Rā* ; and an obliterated *Vā* between *Rā* and *Jā.*

XII-3—The engraver has originally written *Tasa Tasa* but later the first *Ta* and the second *Sa* are scored out.

PEDT—III-17—A latter is obliterated between *Piya* and *Piya*, probably it was *Pi*.

III-18—After *Kayāne Kate ti* a blank space, perhaps a *Ta* was originally engraved and later obliterated.

(3) ERRORS :

PEDT—II-11—In *Ve* of *Apāsinave*, there is a superfluous horizontal stroke in its lower portion— .

II-12—In *Me*, a vertical stroke is attached to the bottom— .

VI-7—A small superfluous horizontal stroke is attached to the left of the lower postion of *Ve* in *Pativekhāmi* — .

REG—VI-4—An apparent medial *U* mark is attached to the bottom of *Pativedakā*— .

VI-14—In the word *Anuvataram*, the letter *Ra* looks like *Rā*

IX-8—In *Pakarane*, the letter *Ra* is shaped like *Rā*.

XIII-7—So also in *Samavairam*, the letter *Ra* is like *Rā*.

PEDT—VII-26—In *Nānāpāsandesu pi me* the letter *Pi* looks like *Ghi*.

THE STANDARD SHAPE OF AŚOKAN BRĀHMĪ SCRIPT

VOWELS

A- 𑀅, 𑀅, *Ā*- 𑀆, 𑀆, *I*- 𑀇, *E*- 𑀏, *U*- 𑀉

O- 𑀑, *Aṃ*- 𑀅𑀁, 𑀅𑀁.

CONSONANTS

Ka- 𑀓, *Kha*- 𑀔, *Ga*- 𑀕, *Gha*- 𑀖,

Ca- 𑀘, *Cha*- 𑀙, *Ja*- 𑀚, *Jha*- 𑀛, *Ña*- 𑀜,

Ṭa- 𑀝, *Ṭha*- 𑀞, *Ḍa*- 𑀟, *Ṙa*- 𑀟, *Ḍha*- 𑀠, *Ṇa*- 𑀡,

Ta- 𑀢, *Tha*- 𑀣, *Da*- 𑀤, *Dha*- 𑀥, *Na*- 𑀦,

Pa- 𑀧, *Pha*- 𑀨, *Ba*- 𑀩, *Bha*- 𑀪, *Ma*- 𑀫,

Ya- 𑀬, *Ra*- 𑀭, *La*- 𑀮, *Va*- 𑀯, *Śa*- 𑀰,

Ṣa- 𑀱, *Sa*- 𑀲, *Ha*- 𑀳.

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